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ONLINE TODAY

THE COMPUTER COMMUNICATIONS MAGAZINE

April, 1987 $2.50

ELECTRONIC WHITE PAGES

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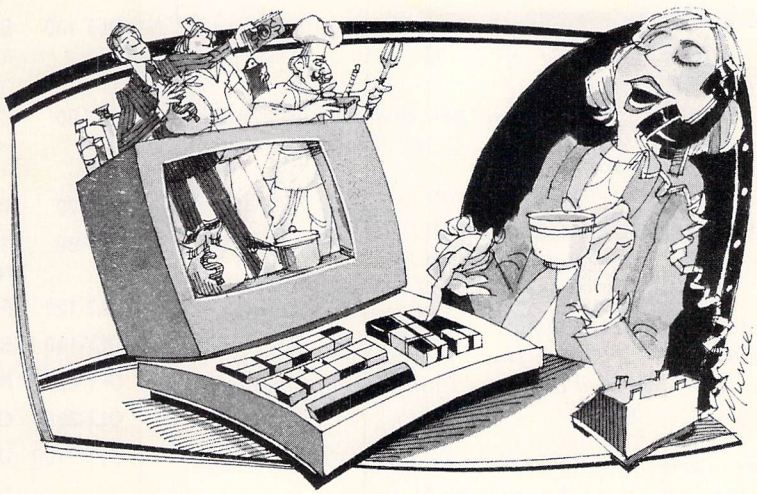

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ELECTRONIC EDITION

Online Today Electronic Edition provides daily-updated computer and information industry news, coverage of CompuServe services, commentary, computer product reviews and more.

GO OLT	**A GO-Page Directory** *of the day's top computer industry news and a summary of key OLT page numbers.*
OLT-160	**The Monitor Daily News** *main menu.*
OLT-90	**Today's Computer and Information Industry News.**
OLT-20	**The Current Week's Monitor News.**
OLT-130	**Behind the Screens.** *Computer and information industry news, rumor and gossip.*
OLT-50	**CompuServe Update** *main menu. Lists all CompuServe news departments.*
OLT-70	**What's New on CompuServe.**
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OLT-120	**Forum Conference Schedules.**
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OLT-3500	**Online with Charles Bowen.**
OLT-3700	**Uploads.** *A bi-weekly column summarizing new files in forum data libraries.*
OLT-1000	**Computer Events Calendar.**
OLT-2000	**OLT Special Reports.**
OLT-3000	**Computer Legislation Database.**
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EBB-160	**Online Today Display Ads** *main menu.*
EBB-70	**Shopper's Guide.**

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DEAR READER

A recent Lou Harris poll about travel and travel agents revealed something that many CompuServe subscribers already know: people want room for creativity when planning a journey. People who use online travel services take the responsibility—and enjoyment—of putting together their own itineraries and adding the personal touches that really make a vacation special.

Whether you're traveling within the United States or to most anywhere in the world, you can use CompuServe's online travel services to plan a business or pleasure trip from start to finish.

Need information about visa requirements and travel restrictions to a foreign country? The Department of State Advisories, Pan Am Travel Guide and Visa Advisors Service are just a few keystrokes away. Want to make your own flight reservations with the ability to compare air fares, restrictions and schedules for yourself? Try The Official Airline Guide Electronic Edition or Travelshopper. Need to check out accommodations in Spain? The ABC Worldwide Hotel Guide is available 24 hours a day to your home or office. And if you need advice on any phase of trip planning, you can consult travel professionals in any one of a dozen information databases and discussion forums.

There is no better way to take command of your travel planning than by taking advantage of online travel services. Learn what's out there and how to use it in this month's cover feature, "Gateways to Getaways," beginning on page 12. Also, if you've felt intimidated by the separate command system used in airline databases, be sure to check out the OAG and Travelshopper tutorials on page 19.

* * *

A new and improved CompuServe subscriber directory is now available online. Unlike the old subscriber directory, the new CompuServe "white pages" lists all subscribers who do not specifically request to be excluded.

To find out more about the new subscriber directory, including information on how to have your name deleted if you so desire, read "Making Connections" on page 21.

* * *

Many of you may fondly remember the daytime connect charge special offered by CompuServe last February. Many of you may also be happy to know it's back. Beginning this month and running through May, daytime connect charges will be the same as standard (evening and weekend) hours. Connect charges are $6 an hour for 300 and 450 baud and $12.50 per hour for 1200 and 2400 baud.

All CompuServe services—except where otherwise noted online—will be available at the special rates. All applicable telecommunications and product surcharges will still be in effect during the special.

Take advantage of this opportunity to use news or financial services while at the office. Or, sign on early when you get home from work and explore new areas of the CompuServe Information Service.

Douglas G. Branstetter
Editor

ONLINE TODAY

***Online Today*®, April 1987**
Volume 6 Number 4

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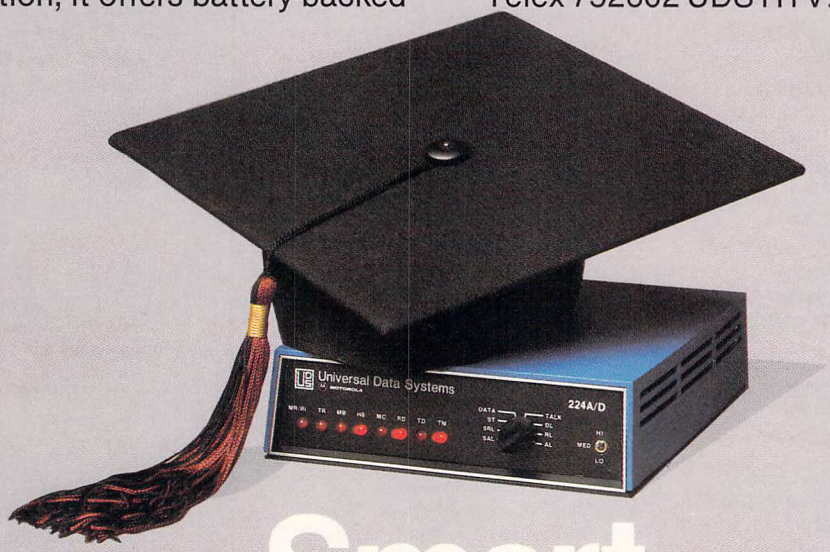

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Electronic Bounce Back is *Online Today*'s electronic version of the traditional reader inquiry card. To request additional information about products or services described in *Online Today*, simply access CompuServe and type GO EBB at any prompt.

CompuServe Page EBB-1
ONLINE TODAY ADVERTISERS
ELECTRONIC BOUNCE BACK (EBB)

1. EBB Instructions
2. Online Today Display Ads
3. Print Edition Reviews
4. Shopper's Guide Classifieds

Display Ads

GO EBB-160. Inquiries to this section will be followed by a brief description of the *Online Today* ad. To request additional printed information, simply enter your name and address at the prompts. EBB will add your User ID number and electronically forward your request to the appropriate advertiser(s). The names, addresses and User ID numbers will also be forwarded via US Mail at the end of each month.

CompuServe Page EBB-160
ONLINE TODAY ADVERTISERS/EBB

1. April 1987 Advertisers
2. March 1987 Advertisers
3. Feb. 1987 Advertisers

Editorial Articles/Reviews

At the end of each electronic version product review, you'll be asked if you wish to request further information through the Electronic Bounce Back system. A "yes" response will let the system prompt you for your name, address and other information so that your request can be forwarded to the appropriate company. If you respond "no," the system will return you to the previous menu.

To request information about products reviewed in the print edition, go to page EBB-280 and select the appropriate listing, such as April Hardware Reviews. At the next menu, select the product you're interested in. If you answer "yes" at the question prompt, the EBB system will prompt you for the necessary information.

Requests to these sections will be stored and forwarded by traditional mail once each month.

CompuServe Page EBB-280
REVIEW LISTINGS/PRINT EDITION

1. April Hardware Listings
2. April Software Listings
3. April New Product Listings

Shopper's Guide

GO EBB-70. This is *Online Today*'s classified section and is designed to enable readers to easily scan areas of interest.

To request information from Shopper's Guide advertisers, send messages via CompuServe EasyPlex or use traditional methods of communication.

CompuServe Page EBB-70
SHOPPER'S GUIDE

1. About Shopper's Guide
2. Rates and Information
3. Software
4. Services
5. Hardware
6. General

***Note:**
Additional requests during the same session will not require you to re-enter your name and address.

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Get behind the scenes with Monitor's "Behind the Screens" section on *Online Today Electronic Edition*. Find out what's *really* going on. Type GO OLT-130 from any prompt on the CompuServe Information Service.

ONLINE TODAY

LETTERS

Reviews Section

I find that several of your reviews are interesting. However, I would like to see hardware, software and book reviews of interest to TRS-80 Color Computer users such as myself.

While I have a great deal of software, I would like to know what's available to enhance my hardware capabilities and to correct problems in some of the software programs I have. In addition, I am interested in utilities, business, home management and other programs that may make life a little easier.

Most magazines have abandoned the CoCo users, and other publications such as Rainbow cannot be found.

W. Gene Jackson
Forestville, Md.

Uploads Column

After reading the "Uploads" column in the February issue, I was curious about the Suspend Call Waiting textfile. When I got into the Investors Forum on the CompuServe Information Service, I was confused. I spent 15 minutes looking and still could not find Data Library 0.

In the future could you please include a line-by-line description of how to first get into the data library and second, how to go about reading the data file? I've been downloading files to my Macintosh for more than a year now through the Apple Forums and I am familiar with data libraries and XMODEM protocol.

Tom Williams
New York, N.Y.

Editor's Note: Due to changes in CompuServe's forum software after that issue had gone to press, Data Library 0 is no longer the location of the file you're looking for in the Investors Forum. The file now resides in Data Library 10 as CWAIT.HLP.

Microsoft's Plans

I read with interest the *Online Today Electronic Edition* story about Microsoft's plans for new DOS and the 80386 line of chips. I wonder, though, about Bill Gates' statement that referred to building "a platform to last us 10 years."

Given the speed of advances in computer technology in the past—and Intel's problems with the 80386—I wonder if it is feasible to plan that far ahead, especially in software for an essentially dead-end line of chips.

Larry Phillips
Vancouver, B.C.

Talk to Us

Online Today Electronic Edition has a Feedback area for letters to the editor. Simply type GO OLT-33 from any prompt in the CompuServe Information Service.

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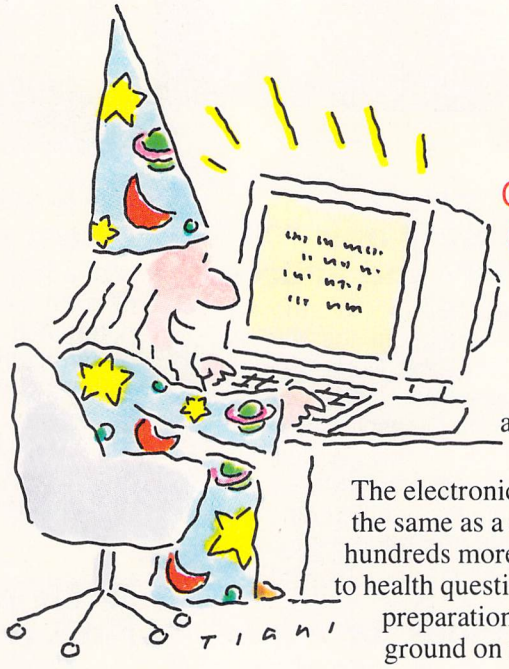

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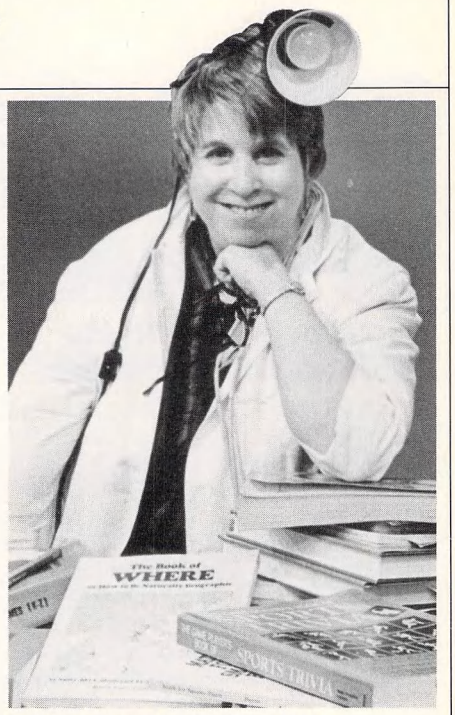
Bookbrain Arrives



Reviewing books for kids: *Hass*

It can be tough to get children to read, but Dr. Rita Book, a.k.a. Elizabeth Hass, has some keys to success.

The "bookologist" is heard weekly on the critically acclaimed "Kids America" radio show, broadcast nationally on American Public Radio. Between radio chats with children about reading and books (offering such advice as "Read two chapters and call me in the morning"), Dr. Book has developed the first interactive book review database designed especially for kids.

Called BookBrain, the program runs on the Apple II series of computers and contains 800 annotations of popular fiction. But these are not your ordinary plot summaries. They are snappy, captivating, funny reviews of children's books, meant to entice a child into running to the library shelf to read the book.

"There was no good way for children to find books on their own. BookBrain gives children access to books in an exciting, independent way," says Hass, who wants to pass on her enthusiasm for reading to the younger crowd.

BookBrain will search a book in five ways: by title, by author, by a single word in a title, by subject and through a series of questions answered by the child. Each listing includes the title, author, annotation, similar books and a place for the child to enter his or her own review.

The package includes a program disk, a librarian's utility disk, multiple data disks and a librarian/teacher guide. Librarians can use the enclosed statistics program to track a book's popularity and report user profiles. The program also can produce bibliographical listings to be used for ordering. The first release is designed for grades four to six with future releases in the works for grades seven to nine and kindergarten to third grade.

The program is unusual in that it is for children —not for teachers, librarians or parents. "I want to help kids develop a reading habit that will only get worse," quips Hass.

BookBrain sells for $195 and is available from The Oryx Press, Suite 103, 2214 North Central at Encanto, Phoenix, AZ 85004-1483; 602/254-6156.

—Cathryn Conroy

New Chips May Cause Software Price Hike

Are we at the end of the era of inexpensive software?

Of course, you may not think that $429 for Lotus Symphony or $399 for dBase III Plus is all that cheap, but we may soon be longing for the days when computers cost more than the programs that run on them.

Why the pending price upsurge? According to John Davis, a New York-based computer industry analyst, the new generation of 80286- and 80386-based computers is to blame.

"It is going to be terribly expensive to program for the protected mode of these new chips," he said. "Companies will need to commit hundreds of thousands of man-hours to the effort. Gone are the days when one fellow could sit down for a few months and come up with a best-selling business application." Davis estimated that the next generation of desktop applications, while offering more power and features, will be priced in the thousands of dollars.

Noted Davis, "These new chips have some exciting capabilities, but somebody is going to have to pay the bill for the software that uses these new features."

Supermagnet Attracts Attention of Researchers

It is so typical of Americans to think that bigger is better. Now we've made the world's strongest magnet.

This isn't the sort of magnet you'll want to stick onto your refrigerator door. This is an electromagnet that uses ultra-strong wire containing niobium filaments. The new supermagnet is capable of achieving a field of 68.4 tesla, more than a million times the strength of the earth's magnetic field. Stick this thing on your refrigerator, and you'll be stopping wristwatches from here to Topeka.

Simon Foner, the magnet's developer and chief scientist at the Massachusetts Institute of Technology's Francis Bitter National Magnet Laboratory, claims that intense magnetic fields provide researchers with an excellent tool for studying the electronic and magnetic properties of semiconductors and superconductors.

We also bet it makes a dandy disk eraser.

Byte of a Preacher Man

"The Computer Show," a weekly television series dedicated to the zany world of personal computers, usually sticks to hard disks, microprocessors and other subjects of interest to the digital trade.

A few months back, however, the program's viewers were treated to an impromptu religious experience when a TV evangelist suddenly flashed onto the screen and began talking about things not entirely related to computers.

Was this, viewers wondered, a repeat performance by Captain Midnight, the HBO vigilante? Was it a message from God that we computer types had all better clean up our respective acts and stop playing Leather Goddess of Phobos? Or, had the Computer Show merely run out of material?

Sadly, none of these explanations proved true. According to a program spokeswoman, the evangelist merely put his signal a tad too close to the Computer Show's satellite transponder frequency, causing a sudden rise in the program's "Hallelujah" quotient.

The episode was repeated a week later, sans religious preaching.

—John Edwards

California Capitol Connection Online

Although Thomas Jefferson and John Hancock would have been puzzled by the thought, the California Assembly is looking at ways technology can enhance the democratic process.

To this end, a legislative database called California Capitol Connection has recently gone online to offer legislators and constituents a close-up view of the legislative process. Included in the database are the texts of bills, committee schedules and even electronic access to certain California legislators.

Eventually, the system will accommodate real-time conferencing so issues can be debated electronically. "We hope this will result in fewer hearings that are held before the issues are really thought out," said Bob Jacobson, a consultant with the California Assembly's Utilities and Commerce Committee.

For more information, contact Jacobson through CompuServe's EasyPlex at 75026,1650 or write the Utilities and Commerce Committee, State Capitol, Room 2117, Sacramento, CA 95814; 916/445-4246. The phone number for the Capitol Connection is 916-442-0746.

Market Growth Projected for Online Databases

The projection for the future of online database services is optimistic indeed: solid growth.

In fact, the industry's revenue should reach nearly $4 billion by the early 1990s, according to research conducted by the Connecticut-based consulting firm, International Resource Development Inc.

All major segments of the market will show strong growth, with particularly good prospects for financial and econometric databases as corporate librarians increase their appetites and budgets for access to online information.

IRD researcher Jean Buffham says the growth will be accompanied by a "settling down" of the market's volatility. "There have been so many entries and departures into and out of this market over the past 10 years, but we're seeing more caution now on the part of vendors," she says, adding that new companies are taking a more sober and realistic approach.

Buffham maintains that despite the expected rapid growth in electronic information vending, this will have relatively little impact on the more traditional print-based publishers. "A few specialized directories will fall by the wayside, to be replaced by electronic equivalents, but we don't see a devastation of the traditional newspaper or yellow pages industries."

She predicts that the consumer electronic news services offered by CompuServe will be "more immediate than newspapers, more in-depth than television, but not threatening to the position of either one."

The secret to electronic publishing's success, according to IRD, is to provide information that is of value to both home and business users. Buffham explains that users' expectations for electronic products are probably higher than for any other type of publishing, possibly because electronic products are more expensive than the traditional print methods.

Specifically, she says electronic users expect frequent updating, new and complete information and a wide variety, immediate response, confirmation of requests, compatibility of equipment with services and products, and customer support.

The essence of publishing is communication, and electronic publishing brings new opportunities, says Buffham, specifically direct and instant communication, one-on-one communication and interaction with the information.

For information, contact International Resource Development Inc., 6 Prowitt St., Norwalk, CT 06855; 203/866-7800.

—Cathryn Conroy

'Type-Ahead' Function Saves Online Time

Computer people may be the most impatient people on earth. The machine we sit in front of is fast—extremely fast. And the faster it goes, the faster we want it to go.

Add to that the fact that online time is money and we get really impatient since we tend to hear that "meter" ticking while we're online. But impatience can be a detriment, especially to new users of online services, who will find that if they can put aside some of their cost worries until they learn the system, they'll save money in the long run by becoming more efficient.

Still, there are ways to save a little time (and money) without robbing yourself of experience. One way is by using CompuServe's type-ahead function.

Simply stated, type-ahead allows you to send commands to the CompuServe host computers before the command prompt appears.

For example, let's say you want to get online to check for a message you're expecting in a forum. You may not care to read waiting EasyPlex mail or anything else at that moment.

After entering your User ID number and password, you'll see introductory material. Depending on how you've tailored the system to meet your needs, you might see the What's New menu, your personal menu, a list of EasyPlex messages or the CompuServe top menu.

While the material is scrolling, you can type the GO command or choose a number from a menu and press the Return key as if you were already at the command prompt.

This type-ahead function serves as a buffer in which the CompuServe system stores commands or other data until it is ready to accept it. Thus, when the system stops for a command and finds you've already typed one into the buffer, it executes that command.

You can even use chain commands. For example, when I check the weather forecast for my hometown of Huntington, W. Va., I don't have to wait for the initial weather menu to scroll to a halt. I know that to get that particular forecast from the main weather menu, I always type LF (for the local forecast submenu) and press the Return key. Then I type HTS (for the Huntington forecast) and again press the Return key. So, while the initial weather menu is still scrolling, I type commands following my usual procedure, then sit back and watch the forecast scroll by.

The type-ahead function is particularly useful when you enter the same commands every time you log on for specific information. For example, you may check the same stock quotes every day or several times a week. After a few times, you have memorized the needed keystrokes to get the quotes you want. This is where type-ahead works for you.

There are some barriers to this type of command bundling. The major one is "One moment please..."

No doubt you've seen "One moment please..." on your screen while moving throughout the system. This usually means that the system is transferring you from one host computer to another. CompuServe is not operated out of one giant computer; it operates from a number of computers that are linked together. Some of them are in the main CompuServe building in Columbus. Some are across the street in yet another building and still more are at a facility in nearby Dublin, Ohio.

Thus, if you ask to GO somewhere else on the system and you see "One moment please...," it usually means you're being transferred to another host computer. Once you are on the new host, any commands stored in the buffer on the previous host will be lost.

If you keep this type-ahead feature in mind as you travel the CompuServe system, you'll find that you can save a few seconds here and there. And, in time, these seconds add up to minutes. Plus, you'll be gently prodding yourself to memorize parts of the system that you'll be using frequently as you think ahead to where you'll be when the next command prompt appears.

When I was beginning to learn the "lay of the land" on CompuServe, things went slowly until I learned about type-ahead. Then it became a game for me to try to remember the next command I needed before the system scrolled to a stop at a command prompt. In doing so, I committed to memory a lot of commands and command structures. After that, my learning curve increased dramatically.

I think you'll find yours will too if you learn to type ahead.

David Peyton co-authored How to Get the Most Out of CompuServe. *His CompuServe User ID number is 76703,244.*

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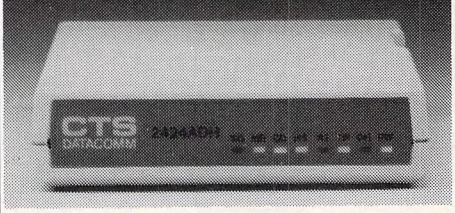

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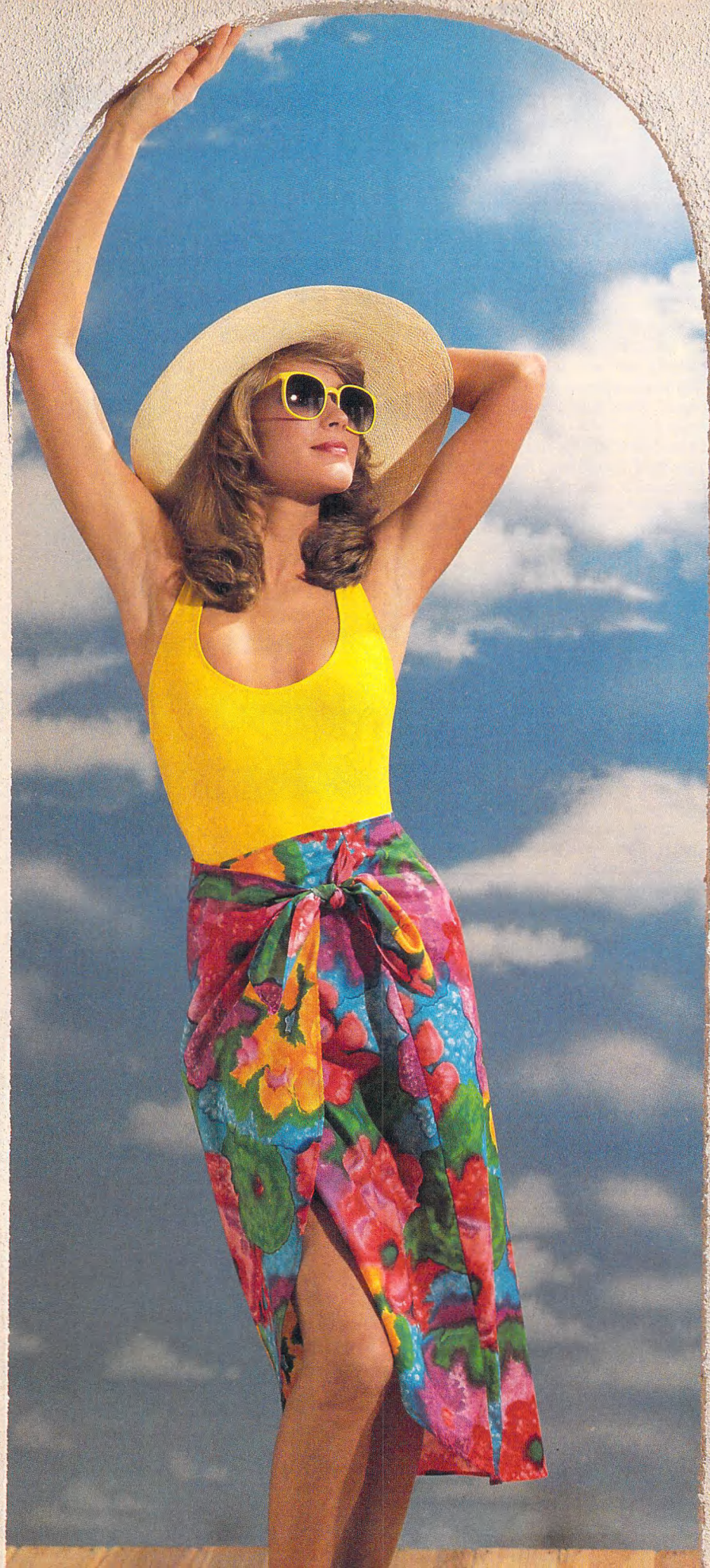


GATEWAYS TO GETAWAYS

by Carole Houze Gerber

Whether it's a stroll through the vineyards of California's Napa Valley, a bike tour through the emerald hills of Ireland or a peaceful moment of contemplation on the cliffs of Kauai, a well-planned vacation can relax the body and nourish the soul.

And while some impatient people seem bent primarily on just "getting there," experienced travelers have learned to savor all aspects of pleasure trips—from perusing that first travel brochure to reviewing their slides long after their bags are unpacked.

The well-planned trip, according to noted travel author Eugene Fodor, is broken into several distinct stages. First comes the joy of planning, when reading and talking about the destination can provide hours of enjoyment. Next comes the departure, when the hearts of even seasoned travelers beat a little faster with excitement. Third is the pleasure of arrival, when the excitement of just being there adds to the fun. Then comes the climax—the stay itself. Finally, the departure provides another type of pleasure as the traveler returns home, laden with memories and mementos.

A great way to heighten this pleasure and also ensure a custom-tailored trip, according to CompuServe Travel Product Manager John Matura, is to use online travel services to handle every part of the experience. The GO TRAVEL command will take you to the main travel menu, or you can directly access databases. (See related article for listing of GO commands.)

"Using online services for ordering brochures, booking reservations and handling other details can take as little as 20 minutes or as long as several hours, depending on how much time you want to spend," Matura says. "Those who really get into it find chatting with others on the Travel Forum (GO TRAVSIG) and the Florida Forum (GO FLORIDA) helps immensely with the planning, and also provides an interested audience to hear about the trip afterwards."

Matura adds that nearly two dozen online services enable travelers to save money and time and avoid costly mistakes. And, he says, it is a friendly and personal way to handle travel planning. "You can participate in a conference with travel professionals and make online friends before reaching your destination. Members of the travel forums enjoy swapping stories. And if you meet someone online who lives near your destination, chances are he'll offer to show you the sights."

What Kind of Traveler Are You?

Like travelers, pleasure trips come in all styles and sizes—from weekend getaways to nearby country inns to lengthy treks that cross continents and time zones. Some travelers want to see these sights from air-conditioned coaches, while others want to mingle with the locals. Some, in other words, want to *observe* the culture, while others want to *experience* it. Observers, for example, blanch at the thought of eating squid in Tokyo or riding a pack horse into the Grand Canyon, while "experiencers" are philosophically committed to "when in Rome, do as the Romans do."

But travelers fall into more complex categories than those of seers and doers; conformists, escapists, self-improvers and pleasure-seekers are the groups in which the globe-trotting Fodor divides them. And, he advises, knowing the type of traveler you are beforehand can save disappointment later.

Once you've determined your needs, Matura recommends looking into the online information available on hundreds of trips suitable to every type of traveler. Although online services were not set up with Fodor's categories in mind, particular databases are remarkably well-suited to serving certain types of travelers.

"Self-improvers usually take travel very seriously, for example," Matura says. "They want to learn a lot about the destination beforehand and they often see the trip itself as an education. The Educational Travel Connection (GO ETC) is a good place for them to start. Pleasure-seekers, on the other hand, really want to rest their brains and their bodies. Sun 'n' Sand Vacations (GO SNS) provides an excellent resource for these travelers."

Matura, who says tours appeal to conformists who prefer time-tested destinations and travel with all the wrinkles removed, recommends American Express ADVANCE (GO AXP or GO AMEX) as a fine source of tour information. "Group travel offers many advantages even to seasoned travelers," he says. "It usually is less expensive and it shelters travelers from hassles, such as locating a hotel in a strange city or dragging six bags through customs. Also, the tour guide can provide information about the locale that enhances the experience.

"All tours are not necessarily 'tame', either," Matura adds. "There are many exciting adventure tours for the escapist traveler who wants a major change from everyday life."

Top Trips for All Travel Types

Due to such factors as special prices on rental cars, coach tours and air fares, inexpensive tour packages, and a range of moderately priced accommodations, pleasure travelers are on the move as never before. According to a recent Gallup poll, a record-breaking 45 million Americans pack up and take off each year. And, for the first time, according to a 1986 survey by the Air Transport Association, airline passengers traveling for pleasure outnumbered business travelers 54 to 46 percent, respectively.

Although some travelers' getaways still consist of piling the kids into the car and heading for grandma's, many are venturing much farther afield. According to the World Travel Organization, more than 300 million international trips—not all by Americans, obviously—were made last year. While foreign travel by Americans was down last year due to terrorism, people still opted for faraway travel: Hawaii had a record-breaking year, as did Alaska, where cruises through the Inside Passage—a protected waterway of glaciers, fjords and forested mountains—reached an all-time high.

California—especially the 782 square miles of Orange County containing breath-taking mountains and beaches, as well as the ever-popular Disney World—is one of the most popular vacation spots in the continental United States. Other western states also are popular, especially with campers. And although fear of terrorists kept most Americans off Mediterranean cruise ships, many simply switched to another ocean—the Caribbean.

"Cruises have become very popular among many age groups," says John Matura. "There's a popular stereotype that cruises are for those in their 'sunset years' and that's not the case at all." Matura cites a recent study by Cruise Lines International that revealed that the prime candidates for cruise vacations are families, single adultsbetween 25 and 39 years old, and older men. Those who have taken cruises are very satisfied with them, Matura adds. "Seventy-six percent of these travelers said they'd like to take another cruise."

Caribbean Cruises Most Popular

For all ages, the most popular cruises are to the islands of the Caribbean, and studies show that the popularity of travel to this azure sea will continue to grow. Trips to the Caribbean—including land vacations and cruises—are projected to increase from the current 2.7 million to 5.2 million within the next 15 years, according to the World Travel Organization.

Martinique, St. Croix, St. Thomas and St. Maarten/St. Martin are top Caribbean destinations, as are the ever-popular Bahamas. Online, Sun 'n' Sand Vacations (GO SNS) and American Express ADVANCE (GO AXP or GO AMEX) offer a wide selection of cruise vacations for the Caribbean, and cruise and other vacation packages for Mexico, Alaska, Hawaii and many other destinations.

The Florida Forum (GO FLORIDA) offers frequent conferences on cruise travel hosted by guest experts.

Although some cruise travelers' exercise consists primarily of pushing themselves away from food-laden tables, most cruise lines now offer a variety of recreational activities to help burn off sumptuous, calorie-packed meals. For example, some cruise com-

panies, such as Norwegian Caribbean Lines, have made arrangements that permit passengers to use selected onshore sports facilities. Royal Caribbean Cruise Line offers a golf/cruise vacation that provides passengers the opportunity to play golf at 13 ports. Even the staid and stately Queen Elizabeth 2 now offers a special "spa at sea" cruise for those wishing to combine fitness and luxury. Whirlpools, saunas and gyms stocked with exercise equipment are now standard on most cruise ships.

Prices range from about $325 for a three-day Carnival cruise between Miami and Nassau to more than 100 times that much for first-class accommodations on a 100-day Royal Viking Line cruise with stops in two dozen countries. Most prices are based on double occupancy, and New York, Miami and Los Angeles are major ports of departure. Dozens of cruise lines offer hundreds of tours to ports of call around the world.

River and canal cruises also are becoming popular, with the Mississippi River a hot spot domestically. European barge cruises, which offer charm in place of spacious accommodations, are also in demand.

Florida Still Top Domestic 'Hot Spot'

Tourism in Florida was up nearly 10 percent in 1986, according to the state's Department of Tourism, and the upswing is expected to continue this year. Last year, 34 million visitors—many of them from foreign countries—made tracks for Disney World, Sea World, the Kennedy Space Center, Cypress Gardens and other Florida attractions.

A magnet for many travelers is Disney World's year-long 15th anniversary celebration, which features such new attractions as the 3-D Michael Jackson film "Captain EO." As part of the celebration, prizes are given away every 15 seconds in either Epcot Center or the Magic Kingdom. Major daily giveaways include a pickup truck and a cruise to the Bahamas.

Excellent sources of online information about central Florida include the Florida Forum (GO FLORIDA), Discover Orlando (GO ORLANDO) and Sun 'n' Sand Vacations (GO SNS). These databases address such topics as attractions, recreation, transportation and accommodations for handicapped travelers. Forum Administrator Larry Wood of Educational Media Services, who serves as information provider for Sun 'n' Sand Vacations and Discover Orlando, recommends consulting all the databases to plan a well-rounded Florida vacation.

"Travelers can use the online inquiries and reservations area to ask our travel consultants questions or make reservations, which will be confirmed within 48 hours," Wood explains. "Vacation information can be searched by destination. Through the databases' inquiries and reservation desks, travelers can order a Florida campground directory and a Florida vacation guide-

Through the Discover Orlando online. ticket service desk, they can order "Attraction Action" membership cards, good for substantial discounts on many attractions."

Wood adds that a new feature on all Florida-related databases is the opportunity to purchase the Hale Irwin Golfer's Passport, which offers members two rounds of golf at more than 1,300 courses nationwide. Irwin Passport holders pay no greens fees.

For Disney lovers, a series of articles posted in a data library (DL 13) of the Florida Forum called "How Does Disney Do That?" explain the technology behind the magic. Articles address such topics as the Utilidoors—the underground mechanical system at the Magic Kingdom—and the DACS computer system that runs Epcot Center.

Through Dateline Florida, a subsection of the Florida Forum that posts current news releases, members also are closely monitoring the progress of Disney World additions, such as the Norway Showcase, a 58,000-square-foot pavilion whose major feature will be a fantasy voyage on small Viking ships. An events calendar of all major Florida events and descriptions of state parks are posted in Discover Orlando and the Florida Forum.

The forum also provides a message center that responds to travel questions daily and a database called "Florida Ramblings" that features articles on little-known Florida getaways such as the home of author Marjorie Kinnan Rawlings. Both services are provided by tthe Florida Division of Tourism. Another section of this forum is reserved for travel agents, enabling them to communicate directly with travel wholesalers.

Trivia buffs now have two outlets in the Florida Forum: *Tropical Trivia*, played daily in the message base, and *Disney Trivia*, played at 9 p.m. EST Tuesdays. Prizes are awarded in the weekly contest. An online conference, featuring such guests as Disney archivist Dave Smith, and Russell Brower, composer of the theme music for the Living Seas exhibit at Epcot Center, follows the weekly Disney Trivia contest.

Information about Disney World and other Florida attractions also is available on American Express ADVANCE (GO AXP or GO AMEX). Included is information on accommodations anbrief descriptions of attractions. Brochures can be ordered through American Express ADVANCE and reservations also

can be made online.

The Great Outdoors

For a getaway that combines both adventure and solitude, many vacationers say nothing beats a week or two in the country, where senses dampened by urban living are reawakened. Some campers claim that food tastes better outdoors, that colors and sounds are sharper, and that camping puts them back in touch with nature and with themselves.

Camping is the third most popular participant sport of adults and children over the age of 12—only swimming and fishing rank higher, according to a recent Nielsen report for the Go Camping America Committee. About 61 million campers, the Nielsen report stated, annually pack their tents or rev up their RVs in pursuit of campsites around the country.

Many of them choose to camp on the 103 areas of the National Park System that provide camping facilities. According to the National Parks Service, both entrance fees and recreation fees, ranging from $1 to $4, are authorized at many park areas. For about $10, campers can buy a Golden Eagle Passport that permits unlimited access to all National Parks for one year.

For campers interested in really roughing it, Alaska is a popular destination. Spectacular but undeveloped and hard-to-reach park areas provide die-hard campers with possibly the ultimate back-to-nature experience. (For further information about free wilderness camping in Alaska, write to: Alaska Regional Office, National Park Service, 540 W. Fifth Ave., Room 202, Anchorage, AK 99501.)

Others who prefer primitive camping conditions may pitch their tents nearly anywhere on the 370 million acres of public lands in the western United States and Alaska. Many of these areas are undeveloped and are accessible only on foot, by horseback or by boat. Other campsites provide toilets, boat ramps, RV spaces, and picnic tables. For specific information about camping on the public lands, check with your state or local Bureau of Land Management office. For online information

about camping, check into West Coast Travel (GO WESTCOAST) and TravelVision (GO TRV).

To order comprehensive but inexpensive travel guides, check into the TravelVision database. The guides include state-by-state coverage of major recreation areas, state and recreation area maps, town-by-town listings of local attractions and other information of interest to campers. For a more in-depth look at certain types of camping adventures, access West Coast Travel, which features three articles on camping in the West: "The Pleasure of the Wilderness"; "Backpacking in the Wilderness: Gearing Up, Etiquette and Skills"; and "Where to Backpack in the California Wilderness."

Planning Smooths Foreign Travel

Although the number of Americans traveling abroad dropped considerably last year due to fear of terrorism, travel agents expect more of us to take the plunge this year. Online services are available to help international travelers plan their trips. They include the Visa Advisors Service (GO VISA), Pan Am Travel Guide (GO PANAM), the Department of State Advisories (GO STATE), TravelVision (GO TRV), the Educational Travel Connection (GO ETC) and American Express ADVANCE (GO AXP or GO AMEX). These databases include information on everything from selecting your flight and finding accommodations to choosing your destination and allaying your fears.

If a recent bombing in France, for example, has you worried about overseas travel, check with the Department of State Advisories to find out what the federal government has to say about political conditions. The Advisory also contains current government information on warfare, shortages of accommodations, currency restrictions and health conditions.

Visa Advisors, a passport and visa service located in Washington, D.C., enables travelers to check online for entry requirements for their destinations and to obtain the proper forms for processing the paperwork necessary for going abroad.

Another source of immigration information is the bi-weekly updated Pan Am Travel Guide, which lists the entry requirements for nearly every place from Abu Dhabi to Zanzibar.

Comprehensive country information also is available on Information USA (GO IUS), which provides 11 sections that include the addresses of American embassies and schools, the cost of living overseas, where to obtain free booklets and the latest information on citizens arrested in foreign countries. To obtain a map of the country you plan to visit, why not check into TravelVision (GO TRV) and use your MasterCard or VISA to place your order online?

If you've yet to select your destination, the Educational Travel Connection and American Express ADVANCE can provide information that will take the chore out of choosing. The Educational Travel Connection, which features trips for those who want to learn while they travel, has recently added to its "Free Items" section the names and addresses of the major European tourist offices located in the United States. This section also explains how to obtain free brochures, films and posters from various countries. In addition, the Educational Travel Connection has enhanced the program listings section so that international organizations now are listed first by their CompuServe User ID numbers.

American Express ADVANCE offers information on a number of international tours and travel packages. Through ADVANCE, travelers can order brochures, request reservations, purchase American Express travelers' checks and travel insurance, and arrange for an assortment of other travel services, such as car rentals.

All American Express vacation packages include transfers between airports and hotels, baggage handling and taxes and tips. After you've made your plans online, an American Express travel agent will phone you to confirm and finalize arrangements.

Tips on Using Online Services

Regardless of your destination, CompuServe's Matura recommends consulting online databases to help plan your trip. "After checking the travel forums to determine who has gone where and why, I'd suggest looking into the databases for more information. The information here is always current and it is much less expensive than buying a general book on Colorado, for example, when you need very specific information on a few camping areas.

In this instance, West Coast Travel (GO WESTCOAST), which contains write-ups on dozens of western destinations, would be a good place to start."

Seventy-five western destinations located in the following areas are included in West Coast Travel databases: Alaska, Arizona, California, Colorado, Hawaii, Montana, Nevada, Oregon, Washington, Wyoming, Vancouver, Utah, and the areas of Mexico located near the western United States. A section on special interest travel that details several types of California-based trips also is available on West Coast Travel.

To find current airfare information about your destination, consult the Official Airline Guide Electronic Edition (GO OAG) or Travelshopper (GO TWA), each of which contains comprehensive information on millions of flights and fares. Fares are displayed chronologically by departure times and are listed from highest to lowest. OAG updates North American fares daily and international fares weekly. Both OAG and Travelshopper offer a variety of ways to obtain tickets, from ordering online to contacting a travel agent by phone.

There is no surcharge for using Travelshopper, which also offers a low fare finder option that will automatically locate the cheapest fare between destinations. Online travel counselors at American Express ADVANCE (GO AXP or GO AMEX) also help with travel arrangements on scheduled domestic and international airlines, commuter flights, trains and cruise ships.

A fast way to find information about accommodations for your trip is to access the ABC Worldwide Hotel Guide (GO ABC), the Official Airline Guide Electronic Edition (GO OAG) or the Worldwide Property Guide (GO WWX). Information about more than 28,000 hotels worldwide is listed on the ABC Worldwide Hotel Guide. The listing for each hotel includes the address, toll-free phone number, rate in US dollars, and availability of sports and leisure facilities. Online searching is narrowed by choosing from price range, exact hotel name, hotel chain, location and amenities such as continental breakfasts and free transportation to and from the hotel.

To obtain hotel information from the Official Airline Guide Electronic Edition, simply type /H and press the Return key for a complete alphabetical listing of accommodations. Data on each listing includes name, address, location, range of room rates and a quality rating.

After choosing accommodations, you'll need to call the selected hotel to reserve a room. For a long stay, you may want to look into renting or swap-

ping accommodations through the Worldwide Property Guide (GOWWX).

This database lists rental property, apartments, condominiums and yachts, and specifies the terms for each transaction.

Online services provide travelers a cost-effective, convenient way to get exactly the type of vacations they want, according to Matura. "A survey conducted last year by Lou Harris showed that one of the things travelers value most from their travel agents is creativity. Our online services give travelers convenient tools for coming up with the best trips at the best prices. Now that's creativity at its finest!"

Carole Houze Gerber is a contributing editor of Online Today. *Her CompuServe User ID number is 70007,1215.*

Trademarks: American Express ADVANCE is a registered trademark of American Express Travel-related Services Co. Discover Orlando is a trademark of Zink Publishing.

Online Travel Guide

A handy reference of GO commands and databases featuring online travel services is listed for your convenience.

Main Travel Menu	GO TRAVEL
Adventures in Travel	GO AIT
American Express ADVANCE	GO AXP or GO AMEX
ABC Worldwide Hotel Guide	GO ABC
Department of State Advisories	GO STATE
Discover Orlando	GO ORLANDO
Educational Travel Connection	GO ETC
Florida Forum	GO FLORIDA
Information USA	GO IUS
Official Airline Guide Electronic Edition	GO OAG
Pan Am Travel Guide	GO PANAM
Rocky Mountain Connections	GO ROCKIES
Sun 'n' Sand Vacations	GO SNS
Travel Forum	GO TRAVSIG
Travelshopper	GO TWA
TravelVision	GO TRV
Visa Advisors Service	GO VISA
West Coast Travel	GO WESTCOAST
Worldwide Property Guide	GO WWX

How to Use OAG-EE to Plan a Trip

The Official Airline Guide Electronic Edition includes unbiased schedule and fare information for more than 750 airlines worldwide. By learning a few basic commands, you can make complete travel arrangements for your vacation.

You can find convenient schedules and applicable fares or you can search for the lowest fares and then find the schedules. OAG Electronic Edition allows you to check availability, read limitations and book a flight. Several ticketing options are available. If you choose Thomas Cook Travel to issue your ticket, you also can request hotel and car rental reservations online.

To access the OAG Electronic Edition, type GO OAG at any prompt on the CompuServe Information Service and select "Accessing OAG EE" from the main menu. To leave the OAG Electronic Edition at any time, type /Q and press the Return key.

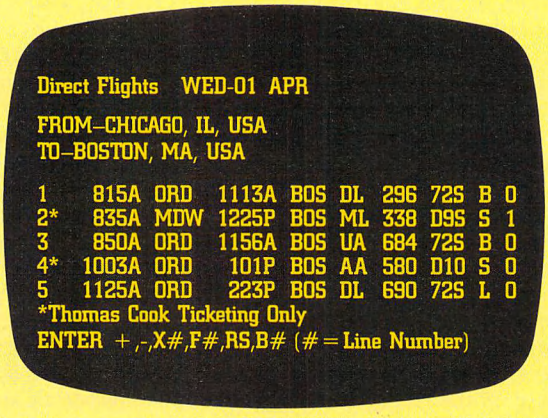
To find schedule information first, use the following format:

/S Departure city;Destination city Date Time

For example, if you lived in Chicago and were planning a trip to Boston and wanted to leave around 10 a.m. on April 1, you would type:

/S Chicago;Boston1APR10A

The OAG Electronic Edition will display up to six airline schedules for the city pair and time you request. From this display you have several options to continue your search. To view all of your options, type ? and press the Return key.


Direct Flights WED-01 APR
FROM–CHICAGO, IL, USA
TO–BOSTON, MA, USA
1 815A ORD 1113A BOS DL 296 72S B 0
2* 835A MDW 1225P BOS ML 338 D9S S 1
3 850A ORD 1156A BOS UA 684 72S B 0
4* 1003A ORD 101P BOS AA 580 D10 S 0
5 1125A ORD 223P BOS DL 690 72S L 0
*Thomas Cook Ticketing Only
ENTER +,-,X#,F#,RS,B# (# = Line Number)

To find the fares for a specific flight, type F and the line number of a flight. For example, to view the fare information for the fourth listing, the flight leaving Chicago at 10:03 a.m., you would type F4.

To find the availability (remaining seats left) for a flight and begin the flight reservation process, from any schedule screen type B and the line number of a flight (for example, type B4).

To continue with the booking process, OAG Electronic Edition will prompt you for your name, mailing address and billing information.

If you want to find the lowest fares for a specific date, you would type: /F Chicago; Boston-1APR. To find the lowest fares on all departure dates, type /F Chicago;Boston99. For either entry, you will see the Fare menu.

The OAG Electronic Edition will let you choose from several fare categories, including first-class only, coach and business class fares or advance purchase and excursion fares. When you make a selection, the OAG Electronic Edition will ask you whether you're flying one-way or round-trip. Once you respond, you will see up to nine fares from low to high.

From the fare display, you can type ? and press the Return key to view your options to continue. If you type S and the line number of the fare from the fares screen, you can see the schedules that apply. To view the limitations of a fare, type L and the line number.

For further information, the OAG Help Desk is available 24 hours a day, every day of the year at 800/323-4000 to answer questions or provide free training by phone.

Plan Vacations with Travelshopper

Travelshopper gives you access to up-to-the-minute airline flight schedules, fares and availability to help with vacation travel plans. You can use it in two ways, BROWSE mode and BOOK mode.

BROWSE mode is available to all CompuServe subscribers. You may browse schedules, research fares and make your plans, but you cannot book a reservation in this mode.

To BOOK a reservation, you first must enroll in Travelshopper. Enrollment is free and can be done instantly online. Upon enrollment, you will receive a Frequent Flight Bonus number and 3,000 bonus miles. Your FFB number is your key to accessing the BOOK mode in Travelshopper.

Suppose you want to plan a trip from New York City to Orlando, Fla., for two adults and you prefer an early morning departure on Saturday, April 4 and an early evening return on Sunday, April 12. You've heard that the only seats left were at the regular coach fare but you would like to pay less.

To access Travelshopper, type GO TWA at any prompt on the CompuServe Information Service and select option 5, "Access Travelshopper," from the main menu. You can start with fare displays or flight availability displays. To begin with fares, type F. Travelshopper will prompt you for your departure city or code. For this example, type NEW YORK at the prompt. Next you will be asked for your destination city. Type ORLANDO. Travelshopper then will prompt you for the departure date. You would type 04APR at the prompt.

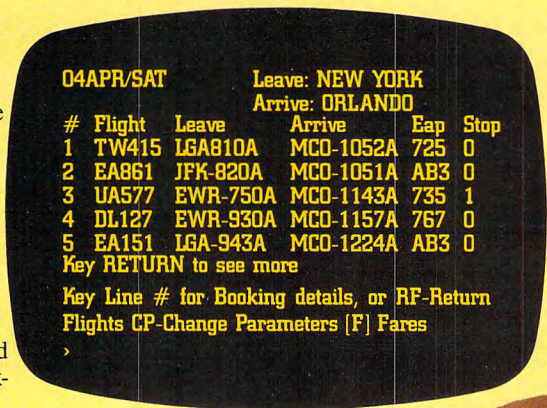
Next you will be asked to choose the type of fare: adult (normal fares); adult (normal and special); child (ages 2-11); and military, government, gold and white FFB card. For example, select adult (normal and special).

Next, Travelshopper will prompt you for the airline name or code if you wish to use a specific carrier, or you may press the Return key for a display of all airline fares. You will see a display of available fares in ascending order with the applicable airline. Press the Return key for more fares or type the line number of a particular fare for a full explanation. Note the restrictions applicable to that fare to make sure you qualify. Also, you will need to make note of the booking code to obtain that fare.

After locating the desired fare and checking the restrictions, you are ready to reserve your seats. Type A to go to the flight availability display. Travelshopper will remember your destination and departure date but will ask you for your preferred departure time to the nearest hour. For example, if you would like to leave at 8 a.m., type 8A at the prompt, or you may press the Return key if you have no preference.

Travelshopper will ask you for the number of seats required. For this example, you would type 2. You will see a display of available flights on all airlines, starting with the flight closest to your preferred departure time.

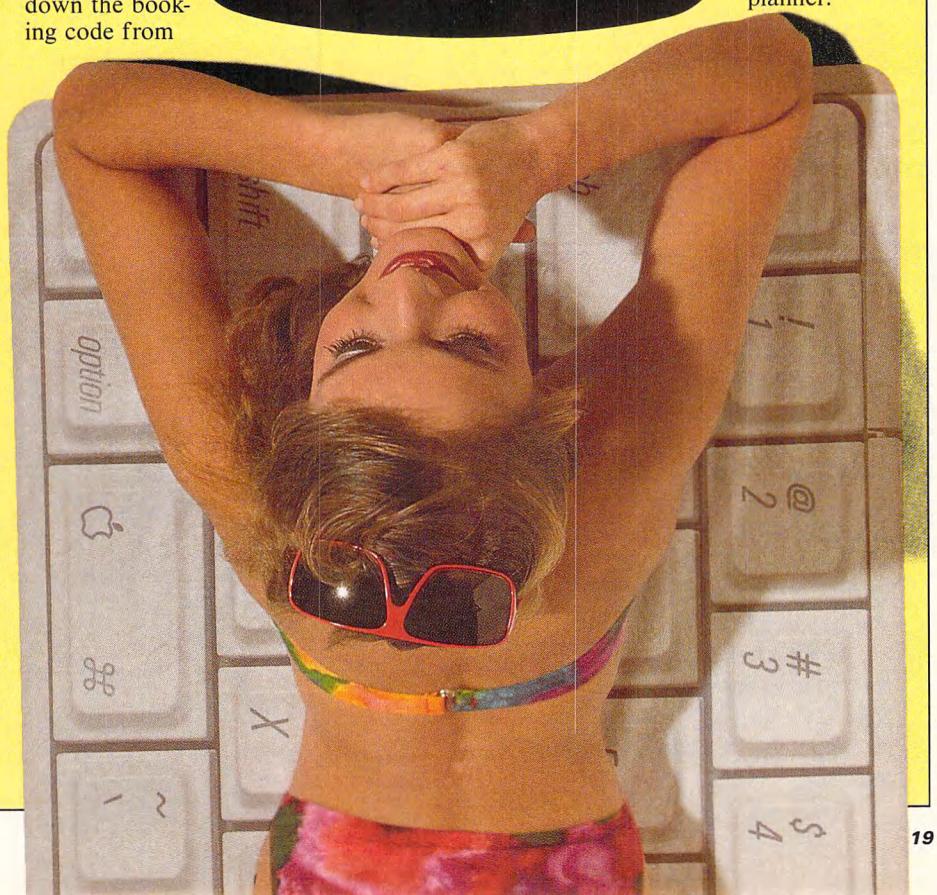
Type the line number of the flight you prefer and Travelshopper will display the booking details, showing you which classes of service are available on that particular flight. Since you have jotted down the booking code from the fare display, simply type the line number that corresponds to that booking code and (assuming that seats are available) your reservation will be confirmed.


04APR/SAT
Leave: NEW YORK
Arrive: ORLANDO
Flight Leave Arrive Eap Stop
1 TW415 LGA810A MCO-1052A 725 0
2 EA861 JFK-820A MCO-1051A AB3 0
3 UA577 EWR-750A MCO-1143A 735 1
4 DL127 EWR-930A MCO-1157A 767 0
5 EA151 LGA-943A MCO-1224A AB3 0
Key RETURN to see more
Key Line # for Booking details, or RF-Return
Flights CP-Change Parameters [F] Fares
›

To reserve your return flight, type RF and you will be prompted for the departure date and time and be provided with a list of schedules.

Your reservations now are confirmed. Travelshopper will prompt you for passenger information, such as name, telephone number and ticketing information. You will receive a display of your complete record for verification and to reconfirm the price of your itinerary. You also will receive a personal confirmation number.

After you have used Travelshopper a few times, you may want to try EXPERT mode, whereby all of the entries can be separated by semicolons and typed on one line. But for now, you are well on your way to being an expert vacation travel planner.



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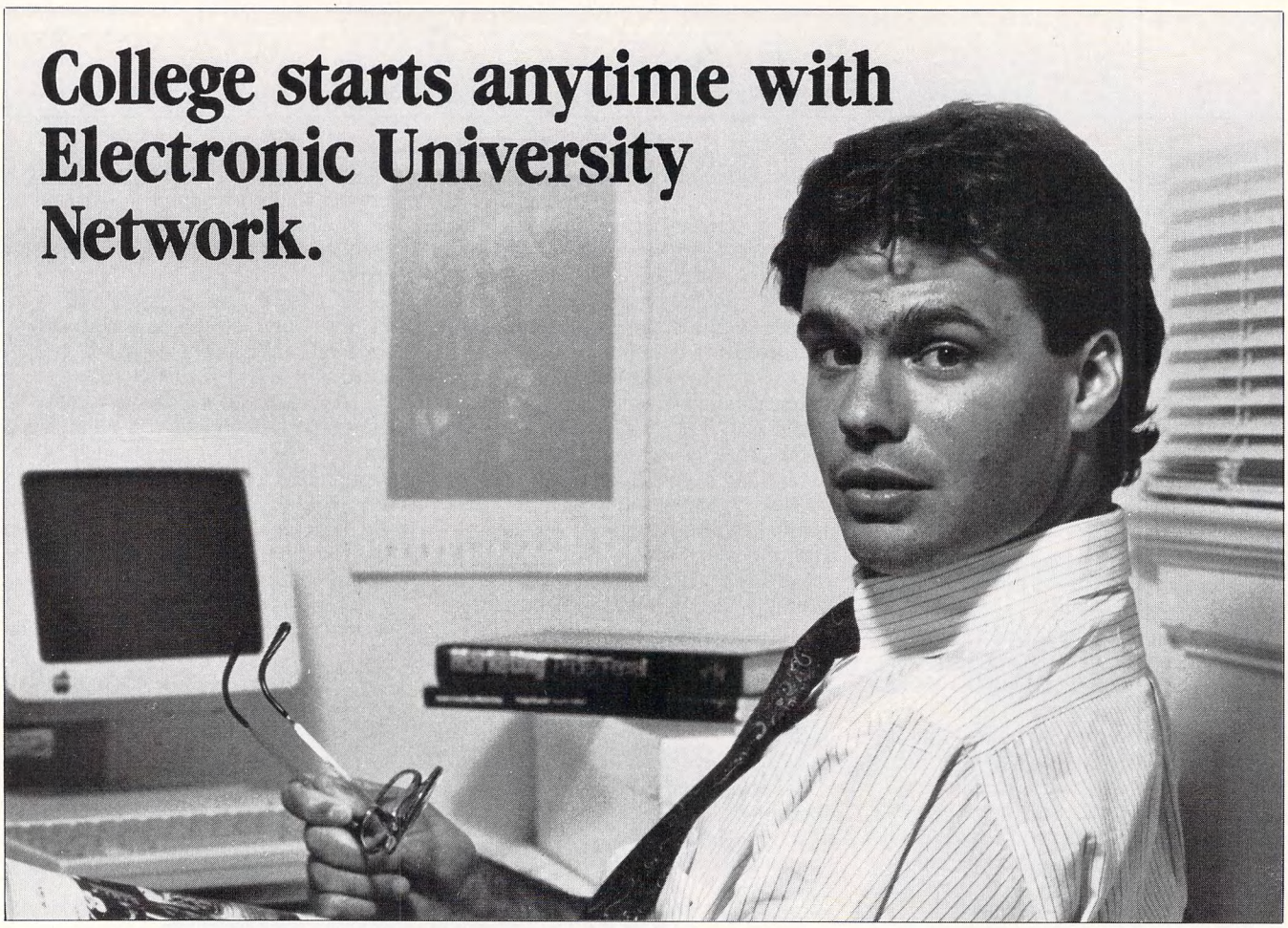

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Making Connections

Directory will Help Subscribers Locate Each Other

Sending electronic mail is fast, easy and relatively inexpensive. There is only one problem: If the sender does not know the recipient's CompuServe User ID number, it is impossible to send that electronic letter. What CompuServe needs is an "electronic white pages."

Upcoming changes in the Subscriber Directory will result in just that. The new CompuServe Subscriber Directory—like a city's telephone book—will be a listing of *all* CompuServe users by first and last name (as it appears on the billing account), city and state and User ID number. Everyone who is a subscriber to CompuServe automatically will be included, unless he or she specifically requests to be excluded. For the latest information on the upcoming changes, check "What's New" by typing GO NEW at any prompt.

The Subscriber Directory currently consists only of those users who specifically requested that their names be listed. Consequently, only a small percentage of the more than 330,000 CompuServe subscribers are listed, making it difficult to locate the majority of subscribers' names and their User ID numbers. The new Subscriber Directory will be more comprehensive, since all subscribers automatically will be included.

"The changes are being made because we felt the Directory did not do all that it could to facilitate electronic communications." explains Beth Sibbring, CompuServe product manager.

Market research surveys consistently have shown that one of the major strengths of CompuServe, when compared to other commercial database services, is its large subscriber base. Making those individuals accessible to one another is, quite simply, the purpose of the new Subscriber Directory.

Those subscribers who do not want to be included in the Directory need only ask. And if they change their minds at a later date and wish to be included, that too is quite easy to do.

Subscribers who wish to exclude their names should type GO DIRECTORY from any prompt. A menu of options will be presented, including one that says: "Do NOT list in Directory." By entering that choice, a subscriber will not be included. It will take approximately one week for the change to become effective. In addition, subscribers can change their minds and later ask to be included. Again, just type GO DIRECTORY and select the menu option "List in Directory."

All listings in the Directory will be by first and last names; "handles" are not part of the new Directory. Only the subscriber's city and state will be included; street addresses, ZIP codes and telephone numbers will not be listed.

Using the Directory is easy and fast. Type GO DIRECTORY from any prompt. Each search initially will be based on the subscriber's name. Then, if more than 15 subscribers match the search criteria, the system will prompt you for information, such as state and/or city, to help narrow the search.

The best place to seek out those with similar interests or computers is in the dozens of CompuServe forums, each of which maintains its own user interest directory. For that reason, interest listings will not be part of the new Subscriber Directory, allowing customers to list their areas of interest and computer type in appropriate forums. If you are unsure about which forums to investigate, try using the FIND command at any prompt (for example, type FIND HOBBIES). To access this information in a forum, type V at the function prompt. You then can search by name, User ID number and interests.

To expedite searches in the forums, Sharon Baker, CompuServe's forum products manager, advises users to be specific. "For instance, enter 'football' instead of 'sports,' and be sure to remember that a lot of words mean different things in different contexts. Be as descriptive as possible."

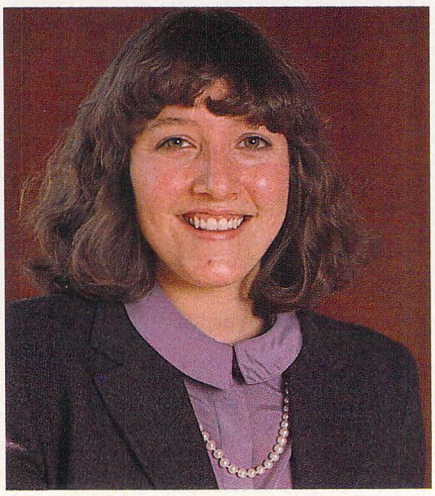
She also encourages all CompuServe users to enter their own names and interests in the interest directories of those forums to which they belong.

The forums truly are the best place to find others with similar interests, according to Baker. For instance, one member of the Auto Racing Forum was having trouble getting delivery of his new Porsche. By searching the forum's directory, he discovered that the director of public relations for Porsche North America Inc. was a forum member. After the subscriber left an electronic message concerning his problem, the Auto Racing Forum member found that the Porsche employee was able to cut through the red tape that had been slowing down delivery of the car.

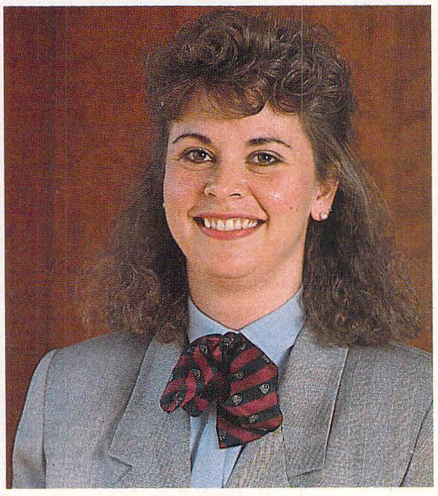
Finding others who can offer support and assistance also is a crucial part of every forum. Those individuals who use land mobile radios, for instance, have found that industry manufacturers provide little quality support for their products once they are sold. Users in the Broadcast Professionals Forum have joined together to help each other, offering crucial information and sharing solutions to common problems.

The assistance users find in the computer forums is legendary. Problems of all types—no matter how complicated they seem—are readily solved by helpful fellow users.

—Cathryn Conroy



Speeding electronic delivery: *Sibbring*



Expediting forum searches: *Baker*

The 'Write' Stuff

Forum Links Amateur and Professional Writers

What do Roger L. Simon, author of the Moses Wine detective novels, Florida newspaper columnist Barbara Crystal, and aspiring screenwriter Jeff Massie have in common? How can commercial director Jim Paisley, television writer J. Michael Straczynski and journalist Perry Norton help each other out? The answers can be found in a word: Litforum.

CompuServe's Literary Forum, or Litforum, as it is usually called, "is a place for writers of all levels and interests to gather and exchange information," says Forum Administrator Alex Krislov, an author of several magazine articles and books. "Our members are as varied as the profession itself. Any form of writing—from James Joyce to comic books—is grist for our mill."

"Many times, people see writers as intellectuals sitting around discussing distinguished authors," says Jeff Massie. "Visitors to the Literary Forum often are surprised to learn that we're like everybody else, with cars that won't start and the other usual problems."

Scan the membership roster and you will run through a gamut of specialties, from best-selling authors to poets to investigative journalists. Also, "subscribers who write for a hobby or simply enjoy discussing their favorite books have a home here, as well as those working to break into the profession," adds Krislov.

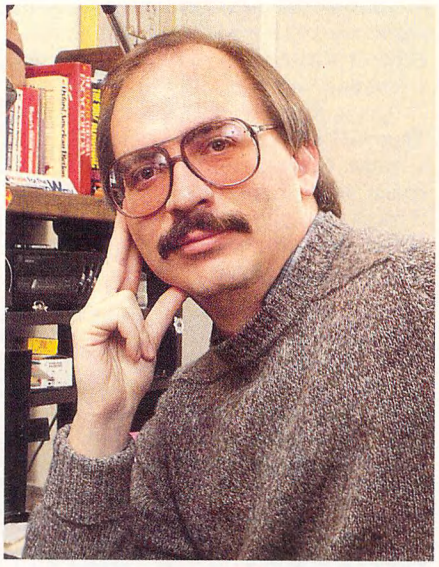
What draws such a vast spectrum of users to the Litforum? "Writers are by nature solitary creatures," observes J. Michael Straczynski, whose recent screenplays included an episode on the "Twilight Zone" television series. His first novel, *Demon Night* (E.P. Dutton), is scheduled for publication this fall. "Because we work on our own so much of the time, we have no support system. Litforum provides a place for an exchange of information."

Jim Paisley is one who joined in hopes of networking with successful screenwriters. Paisley has directed television commercials for Chef Boyardee and New York Telephone. "I uploaded my script, 'Aces,' into a data library so people would read it."

Litforum is a good place for writers to start, according to Roger L. Simon. His latest movie project is "Enemies" based on a story by Isaac Bashevis Singer, with Paul Mazursky directing. "You're dealing with professionals who are earning a paycheck, as opposed to an academic environment, which can only give you theory."

But the forum is more than a place to rub modems with fellow literati. For example, Perry Norton, who lives in New York and writes for regional publications, needed some "local color" for his second novel. "I posted a message on the bulletin board, asking for names of places and events in Atlanta, where my characters were going to be spending some time," he explains. "Well, I started a chain reaction of contacts and received more than enough information in short order."

Adds Barbara Crystal, "Litforum gives me a feel for what's in the marketplace." Crystal, a 15-year free-lance veteran, has written for *Highlights For Children* and several banking publications in addition to having a weekly column in two Florida newspapers. "I can get a notion of how much to charge for my work and where to pitch my article proposals," she says.



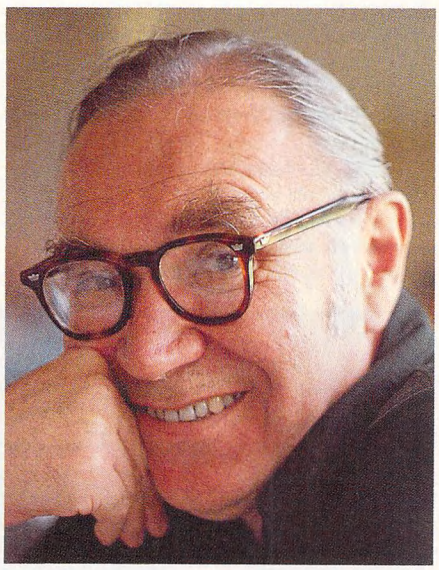
Locating professional writers: *Straczynski*

Perry Norton became electronically acquainted with the publisher of a new magazine when it was in the planning stages. "He invited people to suggest ideas, and I did," says Norton. "He liked what I had to say, and I anticipate he'll be contacting me for future assignments."

Even those who have reached the pinnacle of writing success turn to the forum. "It's difficult to get an honest opinion from your friends, who want to be good to you, or critics, who have their own axes to grind," observes Simon, whose latest Moses Wine novel is *The Straight Man* (Villard, $15.95). "The forum offers a wide audience of interested parties who have nothing to gain or lose from you as a person," he says. Simon also checks with various members around the country to see whether his novels are being properly distributed. "Conglomerates are increasingly narrowing the selection of books in the stores," he notes. "If I know mine don't reach the outlets, I can take action to correct the situation."

Straczynski uses the forum to locate writers for various projects in his capacity as a story editor for ABC Television. "I know I can find professional people who deliver good work," he observes.

Litforum supplies often-needed moral support as well. "When I was in film school, I wrote a short screenplay that was never produced," comments Jeff Massie, a business representative for the National Cartoonists Union in Los Angeles. "I put it aside, even



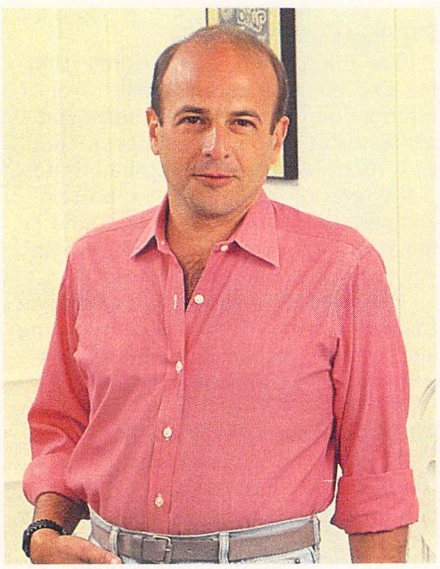
Meeting a publisher online: *Norton*

though I wanted to continue doing scripts. After joining the forum, I saw how it encouraged others. It inspired me to get back on track." After uploading his original work and getting positive feedback on it, he now is penning another longer screenplay. "No matter how successful others think you

are, you always see yourself as striving," observes Straczynski. "Talking to peers who are where you want to be is very encouraging: a warm, fuzzy kind of feeling."

Users also swap experiences with publishers, commiserate over rejections and advise each other on how to overcome writer's block. Like other forums, the Litforum has data libraries, weekly conferences, message boards and bulletins. The data libraries cover related topics, including marketing, poetry, comics and humor, and of course fiction and non-fiction. "I've been turned on to books I would have otherwise overlooked and aspects of writing I'd never been aware of," states Massie. "The forum has greatly broadened my perspective."

Weekly conferences on Tuesday nights at 10 p.m. EST cover a potpourri of subjects. "One week, we'll have a guest, such as investigative journalist Marc Cooper, and the next, we'll discuss science fiction," says Krislov. Sometimes a conference will focus on a member's writings, which are to be reviewed and commented on by all participants. This worked out quite well for Paisley's script, "Aces." "A well-known screenwriter read and liked it and plans on sending it around to his



Checking on book distributors: *Simon*

contacts," says Paisley.

Message threads enable subscribers to put their fingers on the pulse of events. "We've had lively discussions on such topics as bias in the media, elections and sexism in literature," says Krislov. "Although there are disagreements, people come away with a better understanding of other points of view."

The Litforum differs from other CompuServe forums in one respect: "We've taken a stand on what is commonly referred to as the 'Tennessee Textbooks case,' " explains Krislov. Basically, the litigation revolves around a few parents who objected to their children taking a standard curriculum that included works such as *The Wizard of Oz* and *The Diary of Anne Frank* on the grounds that it was against their religion. "The lower court supported the parents by allowing students to be taught reading at home or having the school pay for alternate education at a private religious school," continues Krislov. "We feel the court misinterpreted the First Amendment; schools should not be forced to accommodate students because of their religious preference." The Litforum formed a "friends of the court" organization that will submit a legal brief stating their objections in hopes of reversing the decision when it goes to trial at a higher court. "The results of this case could affect school boards all over the country," adds Krislov.

Users interested in writing might also want to check out the Journalism Forum (GO JFORUM). The JForum

Looking for opportunities: *Crystal*

provides working journalists with a resource index of experts, a file where stringers can list their availability, and a market listing for jobs offered and wanted. Users can swap photography and video equipment, and access information on news events, ethics, and other media including television, photo/video, and radio.

"I use the JForum in conjunction with the Litforum when I'm looking for work," comments free-lancer Barbara Crystal. "Together, they offer a wide range of free-lance opportunities." "Telecommunications opens up all kinds of channels and gets people talking to one another," sums up Simon. "Electronic interest groups such as the Litforum are a great force for positive anarchy."

Now that you've read all about them, why not meet the Litforum regulars? To access the forum, type GO LITFORUM at any prompt on the CompuServe Information Service.

—Sandra Gurvis

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GO EBB or circle 11 on the Reader Service Form.

Toll-free Reservations Added

Rocky Mountain Connections has added a new toll-free reservations number for CompuServe subscribers.

To reserve a featured western vacation package in Utah, Idaho, Colorado, Nevada, Wyoming and Montana included in Rocky Mountain Connections, dial 1-800-553-WEST.

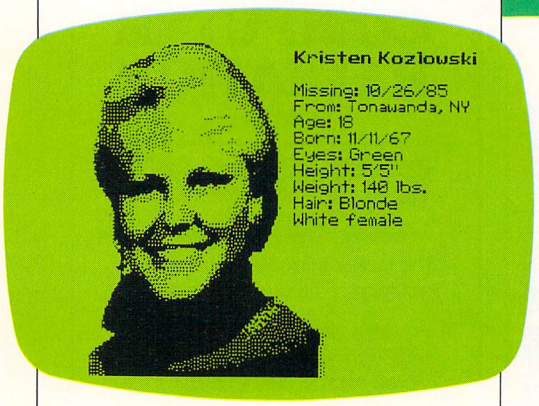
CompuServe subscribers also may continue to make reservations online through Rocky Mountain Connections' online reservations desk. GO ROCKIES

Issues Forum Has Current Topics

The National Issues and People Forum covers several current issues through recently added subtopics.

Rehabilitation engineers now have reserved subtopics for discussion of rehabilitation issues, biomechanics techniques and sensory aids development.

Among the forum's current issues are SDI, Turmoil in DC, Textbooks and Fanatics, Animal Rights, Quality of Education and Job Discrimination. GO ISSUES



Database Tracks Missing Children

The Missing Children database, a joint effort of CompuServe and the National Child Safety Council, now incorporates a new technique for locating the missing.

One online photograph represents a pioneering effort of computer modeling techniques to age the last known photograph of a child before her disappearance.

Using characteristics of the bone and muscle structure characteristic of the parents, changes in the child's features, which the maturation process would have caused since her disappearance, are applied to the digitized photo. GO MISSING

Cruise Travel Now Featured

Writer Lee Foster's "Adventures In Travel" series now features cruise travel.

The first article explores "Cruise Vacations: The Seaborne Alternative" featuring cruise information gathering, including major cruise companies' addresses and phone numbers.

Other articles describe cruising in the Caribbean, the Mexican Riviera and Alaska. GO AIT

Irwin Golfer's Passport Online

CompuServe subscribers now can receive free greens fees and discounts at more than 1,300 golf courses and resorts with the Hale Irwin Golfer's Passport now offered in Discover Orlando.

For a $44.95 12-month membership fee ($39.95 for Florida Forum members), you can play golf without paying greens fees on any listed course. You pay only for a motorized cart and for a $3 minimum pro-shop purchase per couple.

In addition, some of the finest golf resorts are offering discounts to Passport members. GO ORLAND

ETC Expands Travel File

The Educational Travel Connection has expanded its international travel information to include the names and addresses of the major European Tourist Offices located in the United States.

Listings of free brochures, posters and promotional films may be found in the Free Items section of ETC to help you plan your European vacation.

ETC also has enhanced the Program Listings section of its service by listing international organizations by CompuServe User ID number first. GO ETCO

AEJMC Forum Now Available

The Association for Education in Journalism is a professional organization dedicated to mass communications research.

Academicians and professionals use the AEJMC Forum to help teach today's students how to communicate tomorrow. Professionals use AEJMC to research the effect of mass commmunications and the way people use and sometimes abuse the media. GO AEJMC

Cheering on the champions: *Sailing Forum members followed Stars 'n' Stripes crew*

Sailing Forum Charts Progress of Races

Picture yourself circumnavigating the globe in a sailboat. The clear water radiates blue and white sparkles as the tropical sun beats on your back. You can barely glimpse your opponent's rig on the horizon. And your Argos satellite computer links you with CompuServe.

What does CompuServe have to do with this fantasy? The Sailing Forum provides a real-time connection with races such as the BOC Challenge just described. This single-handed, around-the-world competition began in August 1986 from Newport, R.I. and more than 20 sailboats, with one person per boat, are circling the globe—the stuff of which legends, sailing and otherwise, are made. Not only do the Sailing Forum's data libraries provide continuous position reports on each boat via the Argos satellite, but also *Sail* magazine, the forum's official worldwide information provider, supplies updates on competitors and weather conditions. *Cruising World*, the official publication of the BOC Challenge, also furnishes articles and information on the race.

In another data library, the Sailing Forum carried reports on the prestigious America's Cup race, which the United States ship, *Stars 'n' Stripes*, won this February. The United States has held the America's Cup title for the past 132 years, only losing to Australia in 1983, according to John Lovell, administrator of the Sailing Forum. Lovell plans to have coverage of more sailing competitions, including the Whitbread and Laser World Championships.

The Sailing Forum also is an ideal place for novices to get their feet wet. "We've got the shortest waiting list of any yacht club in the world," says Lovell. But that does not mean the "club" lacks for members. Lovell estimates that 12 new members come aboard each day. "There's a lot of interest in sailing," he says. "And CompuServe provides easy access to information not ordinarily found."

Future skippers even utilize the forum as part of their coursework. The Student Ocean Challenge, founded and headed by Mame Reynolds of Newport, R.I., follows the progress of the BOC sailors at middle and high schools in 30 states and seven foreign countries. Students "adopt" a boat and chart its progress through the race. "The information can be used to teach physics, weather forecasting, oceanography, geography, history and, of course, computer literacy," says Lovell.

If you're "at sea" about any aspect of sailing, online experts, ranging from seasoned captains to the editor of *Sail* magazine, are available. Extensive data libraries detail such subjects as seamanship, types of boats, navigation and outfitting.

Landlubbers and sailors alike participate in weekly conferences every Monday at 9 p.m. EST and Saturday at 10 p.m. EST. "I compare the conference area to the lounge of a yacht club," says Lovell. "You can ask questions about the service, get recommendations on sailing schools, chat about boating and generally have fun." So type GO SAILING and jump right in.

—Sandra Gurvis

America's Best Offered at The Mall

The Electronic Mall puts America's best at your fingertips. Here's a look at five specialty merchants that offer regional gourmet foods and crafts to shoppers electronically.

Florida Fruit Shippers

Florida Fruit Shippers' family-owned packing houses are the largest in the state. The fruit is tree-ripened and hand packed at the right moment.

In April, Florida's premier juice orange, the Valencia, is in season. This sweet, juicy, late season variety basks in the warmth of Florida's sun for a year before reaching maturity. April also is the last month to order grove-fresh Florida grapefruit. Choose from white, pink and an all-time favorite, the Duncan.

Florida Fruit Shippers' online catalog also features gourmet Florida stone crab claws and lobster tails, tropical jams and jellies, and mouth-watering Georgia pecans.

Grove-fresh Florida citrus makes the perfect springtime or Easter gift. Especially recommended is the deluxe assortment, including Valencia oranges and pink grapefruit, tropical jam, orange blossom honey, coconut patties and Georgia pecans, all packed in a colorful Tropical Palmbo basket.

To order Florida's finest, or to request a free full-color brochure, type GO FFS.

Simon David

A Dallas tradition for more than 95 years, Simon David offers shoppers a selection of gourmet items, gift packages and exotic treats. Specialty meats featured online include sirloin strip steaks, veal paupiette, choice Colorado lamb chops and fillets. For those wishing a true gastronomical adventure, Simon David offers fresh frozen rattlesnake meat.

Just in time for Easter dinner, shoppers can order Edwards Virginia Hams, Simon David Boneless Hams or a Simon David Smoked Turkey. For Passover feasts, there's Scottish or Norwegian smoked salmon. And for breakfast year-round, Simon David offers top-quality bacon.

In addition, shoppers will find quality gift items including terracotta cookware, an Italian party box and a Eurotrade vinegar and oil set.

A Texas-style "thank you" is The Texas Gift Basket brimming with Texas treats, including nacho chips, jalapeno peppers, chili con queso and more. New and especially recommended by Simon David are Cheese Straws, savory little treats made with cheddar cheese and packed in a reusable tin.

For sweet tooths, Simon David offers chocolate truffles, Texas Chewie Pecan Pralines and the original Jelly Bellys available in 20 flavors, including very cherry, strawberry daiquiri, licorice, watermelon and bubble gum. Also available online is the original Geolitz Jelly Belly Machine.

For gourmet meats, sweet treats and great gifts from the heart of Texas, type GO SIM.

Hawaiian Isle

Hawaiian Isle's Mall store puts a bit of paradise at your fingertips. The exotic online catalog features products that are a part of the character of Hawaii.

Visit the Tropical Garden for exotic floral arrangements, including The King Kamehameha Arrangement. Named after King Kamehameha who united the Hawaiian Islands more than 200 years ago, this arrangement includes red anthuriums, birds of paradise, red ginger blossoms and exotic green Ti leaves.

Online shoppers also can order Hawaiian orchid sprays, tropical plant assortments and an exotic seed collection.

For a taste of paradise, visit Hawaiian Isle's Gourmet Luau. Especially recommended is the Royal Tapa Luau, an unforgettable feast of the delicacies of paradise. This selection features Hawaiian sweet bread and Sandwich Isle preserves and honey, macadamia nuts and nut butter, Hawaiian Poi (the staple food of the ancient Hawaiians) and a bottle of Maui Blanc from Tedeschi Vineyards of Maui. This table wine has a dry, subtle fragrance and is made from fresh island pineapples. A Tapa cloth, Hawaiian music cassette and a plumeria-scented candle come in a hand-made basket to complete this island luau.

Finally, in Pieces of Paradise, shoppers will discover dozens of unique items from the 50th state including Hawaiian-style shirts, books and a double volcano candle. Suggested for kids are the Hawaiian Hula Bears, a pair of cuddly teddy bears clad in Hawaiian garb.

A selection of floral fragrances includes Wicked Wahine for women and Maile for men.

For those who have visited this Pacific paradise before, a gift from Hawaiian Isle will stir fond memories. And for those who dream of going one day, it's a perfect prelude to an island fantasy.

To go Hawaiian, type GO HI.

Coffee Emporium

Finally, Coffee Emporium brings shoppers the best cup of coffee available anywhere. Located in the San Francisco Bay area, an import location for green coffee beans and the home of some of the best roasters in the world, Coffee Emporium offers the highest grade coffees available.

An online tasting chart assists shoppers in selecting the right blend. Among the gourmet coffees featured are Italian (Espresso) Roast, Arabian Mocha, Sumatra Mandheling, Jamaican Blue Mountain, Mocha Java and Colombia Supremo. Four sampler packs—for connoisseurs, for strong coffee lovers, for medium-bodied coffee lovers and for decaffeinated fans—make finding a favorite blend easy.

Also featured online is a selection of flavored coffees, decaffeinated coffees and teas (loose and stash). For the perfect cup of coffee or tea, a complete line of brewing accessories, including Melitta and Braun, Espresso pots, filters, grinders and cups, is available online.

For coffee and tea to go, type GO COF.

Alaska Teleshopper

Alaska Teleshopper brings the last frontier to shoppers. This merchant's online catalog features unique Alaskan gifts and services, including gold nugget jewelry made of gold panned from Alaskan streams and rivers. Earrings, necklaces, money clips and a gold nugget band Seiko quartz watch are offered.

Many Alaskan art items including fossil ivory scrimshaw, limited edition prints and hand-painted wildlife portraits made of agate are available for ordering online. Color photographs that capture Alaska's unique splendor are offered. And, to bring Alaska to your living room, select a video tape (Beta or VHS) and enjoy the breathtaking beauty of Alaska and its many wonders, including Mt. McKinley and Denali National Park.

For those desiring a true taste of Alaska, Alaska Teleshopper offers seafood gift packs of smoked and fresh salmon, salmon fillets, squaw candy (smoked King Salmon strips), snow crab and shrimp. Shoppers can order fresh/frozen sea packs and enjoy door-to-door air delivery of salmon and halibut; King and Snow Crab, reindeer sausages and more. Alaska wild berry products, including gift packs of jams, jellies and sauces made from fresh, succulent wild berries native to Alaska, also are available.

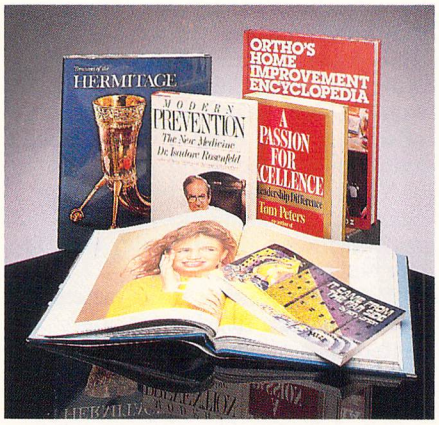
To browse this cornucopia from the 49th state, type GO AK.

APPAREL/ACCESSORIES

APC	Apparel Concepts for Men
IO	Inside*Outside
LH	L'eggs/Hanes Outlet
MJ	Milkins Jewelers
BAG	Woodstock Leather Co.

AUTO

BU	Buick Magazine
CHV	Chevy Showroom
GO	Dutchess CompuLease
FMC	Ford Motor Co.



BOOKS

BAL	Ballantine Books
MH	The McGraw-Hill Book Co.
MER	Mercury House
BK	Small Computer Book Club
WB	Waldenbooks

COMPUTING

ATN	Aaxion Tech Network
CE	Computer Express
GL	Great Lakes Business Forms
HTH	The Heath Co.
IBM	IBM Canada Ltd.
IR	Icon Review
IS	Investment Software
MM	Marymac Industries Inc.
MNU	Menu International
MO	Misco Computer Supplies
SAF	Safeware
SR	Sears, Roebuck and Co.
SDA	Software Discounters of America
WOC	CDA World of Computers

FINANCIAL

BNB	Beneficial National Bank USA
INC	Business Incorporating Guide
CN	Colonial National Bank USA
DWR	Dean Witter Reynolds
EL	Equitable Life
FT	First Texas Savings
HRB	H&R Block
MU	Max Ule Discount Brokerage

GIFTS/GOURMET

AK	Alaska Teleshopper
COF	Coffee Emporium
EX	Executive Engravers
FTH	Fifth Avenue Shopper
FFS	Florida Fruit Shippers
HI	Hawaiian Isle
LM	Lincoln Manor Baskets
SIM	Simon David
TF	Tooth Fairyland
WK	Walter Knoll Florist

HOME/LEISURE

CC	Cosmic Concepts
HC	Hobby Center Toys
MAO	Music Alley Online
NH	New England Habitats
TY	Qualitoy
RR	Rin Robyn Pool & Patio
TSR	TSR Hobby Shop
VCS	Vacuum Advance

MERCHANDISE/ELECTRONICS

ATT	AT&T
BD	Black & Decker Powerline Network
ORD	CompuServe Store
CFD	Crutchfield
OM	Office Machines & Supplies
SR	Sears, Roebuck and Co.
SUN	Sunland Camera

ONLINE SERVICES

EF	EF Hutton
NN	NewsNet
OA	Official Airline Guides, Inc.
VL	Videolog

PERIODICALS

CW	CW Communications
DJ	Dow Jones & Co.
ME	EBSCO Magazine Entree

PREMIUM MERCHANTS

AXM	American Express Merchandise
BL	Bloomingdale's By Mail
NM	Neiman-Marcus

RECORDS/MOVIES

EMC	Express Music
MV	Magic Castle Video
RC	RCA Direct Marketing

HEALTH/BEAUTY

HF	Carolina Health & Fitness
MN	Merle Norman Cosmetics
VM	VitaMenagerie Discount Vitamins

TRAVEL

AF	Air France
AT	Ameropa Travel

Gift of Time

CompuServe Helps Subscriber with Foreign Assignments

In my current assignment with the US Coast Guard, I am required to travel frequently throughout the United States and conduct briefings with delegations from various countries. Traveling into an area that I have never been to before or trying to understand the customs or political structure of another country sometimes can be difficult. CompuServe makes the whole process easier.

Selecting a hotel near the area where I am traveling, at a price range within my per diem limitations, is time consuming if I call hotel chains at random. The ABC Worldwide Hotel Guide (GO ABC) on CompuServe allows me to select a hotel based on several considerations, such as price, location, size and amenities. I haven't yet been disappointed by a hotel choice made through ABC.

My most recent briefing of foreign nationals involved a delegation from Zaire. Thinking back to my high school days, I could not remember a country by that name. A quick check in my old encyclopedia did not reveal much either, so I logged onto CompuServe and signed up for a one-month trial offer to Grolier's *Academic American Encyclopedia* (GO AAE). After I started a seach, I was overwhelmed with information on Zaire, the former Republic of Congo.

I'll consult the vast amount of information available on CompuServe on my next assignment.

James R. Parry
Hayes, Va.

Ask Customer Service

Q: What is a data library?

A: The library facility permits forum members to share files easily. For example, forum members frequently share public domain software, product reviews, journal abstracts, conference transcripts and research reports. Members can read textfiles directly or, if they are using a microcomputer with compatible communications software, they can "download" files directly from CompuServe to their own file storage areas or "upload" files to CompuServe. Typing the "DL" command at the forum's top menu will take you to the library facility, where you can get more information by typing "H" for help.

Q: What is the quickest, most economical method of searching a data library?

A: If you would like a complete listing of all of the files, forum administrators recommend that you do the following:

1. First, you'll probably want to disable the "paging" or the function that gives you the MORE! prompt each time your screen fills up. You may do this in one of two ways: by typing SET NO PAUSE from the Data Library prompt; or by typing GO TERMINAL and then setting your service options for "paging" to "disabled." The SET command is temporary and will be effective only for your current session. The paging service option can be permanently disabled.

2. Enter each data library, open a capture file and type SCA/DES. This will give you, in alphabetical order, all files complete with descriptions, file names, time of upload and the number of times accessed.

Q: How do I get a list of keywords?

A: To get a listing of all the keywords used within a data library, you can simply type KEY after the prompt in a data library menu. You will be asked to "Enter Keyword." Respond with a carriage return and you will be given an alphabetical listing of all the keywords used in that data library. In addition, you will be told how often each keyword appears.

Q: What information is displayed in the file heading?

A: When you see a file heading/description, you will see several important items. First, the User ID number of the person who uploaded the file is displayed. Next you will see the date the file was uploaded. Of critical concern are the next numbers, which are the file size. The first number is the file size in ASCII (as if you were READing the file); the second number, if pre-sent in parentheses, is the file size if you are DOWnloading with a protocol. Please note that this second number is slightly higher than the actual size of the file because of some overhead type of information required by CompuServe.

Next comes the number of downloads. This number is not necessarily a good way to judge whether a file or program is good. Nor is this number kept updated at all times.

Read the description file and decide if the program is what you are looking for.

Q: What do the filename extensions .LBR and .ARC mean? How can I use these files?

A: LBR files are library files that contain a number of related files. For instance, there may be a game that has a data file, a program file and a picture file. When they are in one LBR file, you are assured of getting all of them. Files within a library file can be extracted using any of the LU utility files found within a data library. ARC files are similar to LBR files in that they contain a number of related files, but the files have been compressed and the format is not compatible with the LU utilities. ARC???, PKXARC or ARC-E extract files are from an ARC file and also are available within the data library.

Q: How can I estimate the amount of time it will take to download a file?

A: There are many variables involved in a download to provide a good estimate of the download time. The speed of your transmission, the input/output speed of your hardware, block size used by your communications program, the network you use to access CompuServe, and the number of people online at the time of the download are all factors in the download time. The best way to get an estimate of the time required to download with your equipment would be to download a small file (approximately 3,000 characters) and use the time required to estimate larger downloads.

Q: Who do I contact when I have problems or questions about a downloaded file?

A: If you are having problems running a program downloaded from a data library, you should investigate the situation. First, check the description file in the data library that accompanied the program. Make sure that you have met all of the requirements outlined. Also note if there is a "documentation file" (usually with the filename extension of .DOC) related to your downloaded file available within the data library. Second, using the description file information, contact the subscriber who uploaded the file. Third, ask the administrator (sysop) of the forum by leaving a message. Finally, contact Customer Service with details of the problems.

Q: If I have to contact Customer Service about a data library file, what information do I need to provide?

A: If you need assistance from Customer Service concerning an unsuccessful download, you can send a Feedback message (GO FEEDBACK) with the following information:

- The time and date of the download
- The type of computer you are using
- The network used to access CompuServe
- The transfer protocol selected
- The communications software being used
- The name of the file
- The forum and data library where the file is located
- Any error messages you may have received.

—Ron Hall and James Pascua

These answers and more are available in Customer Service's Question & Answer Database. You can find answers to questions about billing, logging on, using forums, sending EasyPlex messages, using the Personal File area, setting up a Personal Menu and more. Type GO QUESTIONS at any prompt on the CompuServe Information Service.

What's Going On?

If you want to know what's going on around CompuServe, check into *Online Today Electronic Edition*. Here you'll find constantly revised news for and about the CompuServe community. GO OLT-50 from any prompt on the CompuServe Information Service.

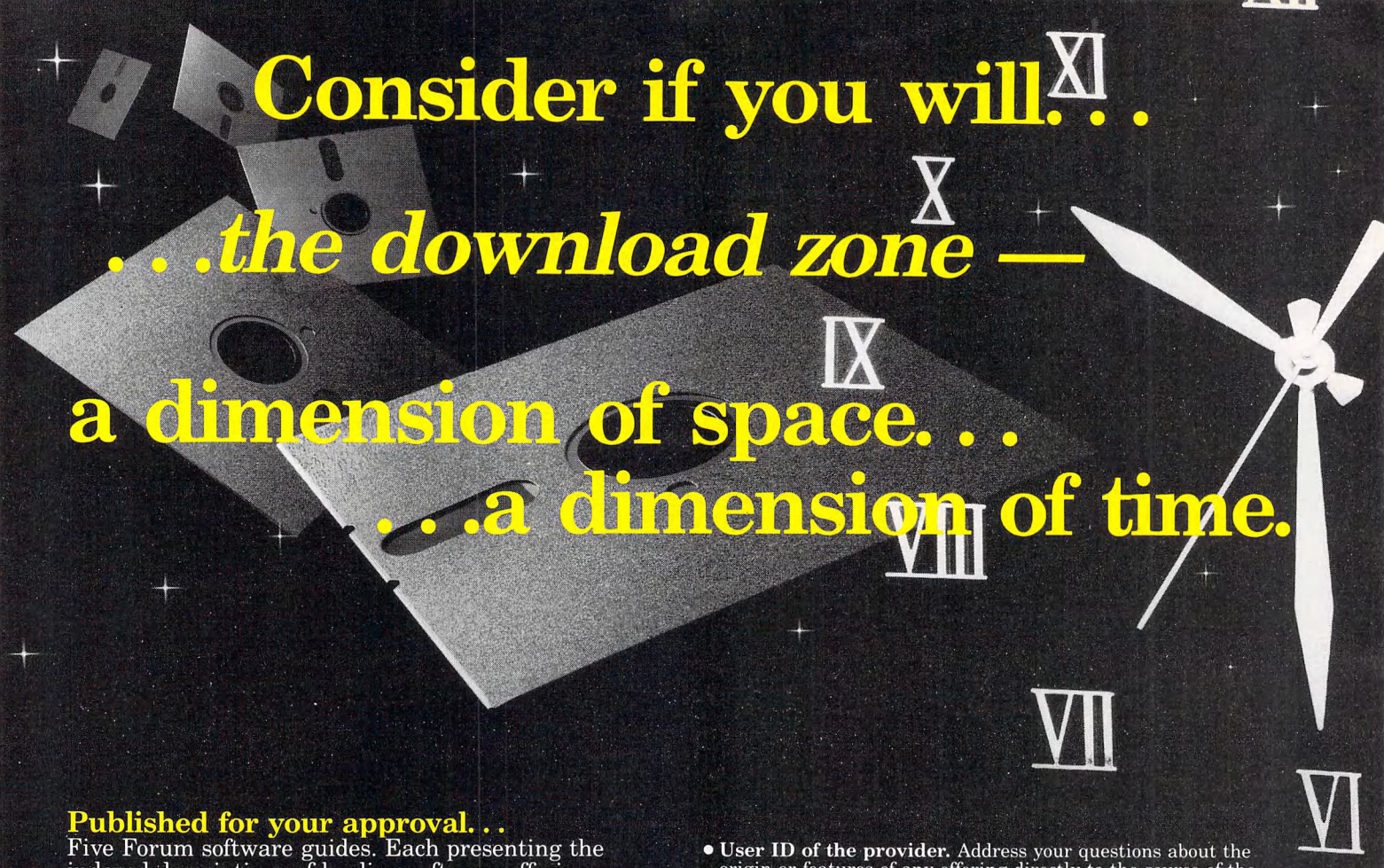
ONLINE TODAY

Consider if you will. . .

. . .the download zone —

a dimension of space. . .

. . .a dimension of time.



Published for your approval. . .

Five Forum software guides. Each presenting the indexed descriptions of leading software offerings from top personal computing Forums. ***The Best of IBMNET***, and four similar guides for the ***Amiga***, ***Atari 8-Bit***, ***Tandy Model 100*** and ***Macintosh Forums***, are essential companions for travel in the download zone. Save time and money — simply by defining your destination before departure.

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- **A unique index.** All files are assigned a reference number. It accompanies alphabetic listings in the guide's index to speed your search for files of interest within the guide.
- **File name.** Uses the "name.extension" format to simplify use of the guide's alphabetic index and provide standard file information.
- **Location (Forum name, library #).** Knowing where you're heading will expedite file retrieval.
- **File descriptions.** Use comments by the author, sysop, or uploader to find out more about special features of files.
- **Size of the file in bytes.** Get a feel for the download time a file will require and the amount of space your disk will need to accommodate it.
- **User ID of the provider.** Address your questions about the origin or features of any offering directly to the source of the upload.
- **Date of submission to the Forum.** Check the release date of software you're now using to assure it's current, or review uploads new since last visit to the forum.

Many file descriptions also include. . .

- **Name of the author.** Pass along kudos and bugs, or suggestions for future releases.
- **Downloading hints.** Note whether a file complements your existing commercial software, is packed along with other files, or requires particular protocols for downloading.
- **Release #, version or date.** Monitor leading edge applications and utilities to assure your version isn't short any bells or whistles.

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Vacation Program Among New Files

The data libraries in CompuServe's forums are filled with thousands of programs and textfiles. Following are only a few of the files uploaded to CompuServe forums in recent months. For more up-to-date reports on uploads, be sure to check the online "Uploads" column by typing GO OLT-3700 at any prompt. New columns are added twice monthly.

AMIGA FORUM
(GO AMIGAFORUM)

User Help—A short help file that answers some of the most often asked questions from new users of CompuServe and the Amiga Forum about downloading files and making them executable. File USER.HLP in Data Library 1.

Software Conference—The transcript of a software publishing conference. The topic was software publishing in general and what an author can expect from a publisher in particular. Participating in the conference were Ben Blish of Soft Circuits, Jeff Johannigman of Electronic Arts, Brian Moriarity of Infocom and William Volk of Aegis. File 861210.ARC in Data Library 2.

ARTIFICIAL INTELLIGENCE FORUM
(GO AIE-100)

Prolog Menus—Source code for a Turbo Prolog program/predicate pull-down menu. This program may be called from within Turbo Prolog in order to create a pull-down menu from which the user may make choices. File MENU.ARC in Data Library 14.

Public Domain Lisp—A short textfile introducing XLISP, public domain LISP, available for many machines and operating systems in this data library. File XLINTR.TXT in Data Library 2.

BORLAND LANGUAGES FORUM
(GO BORPRO)

Word Counter—A simple program for DOS versions of Turbo Pascal (3.x) to count the number of words in a textfile. Uses a speedy online routine that works equally well for string variables and contiguous text buffers up to 64K. File WCOUNT.PAS in Data Library 4.

COLOR SIG
(GO COCO)

CoCo History—"The CoCo Chronicles," a history of The Color Computer, written by Alfredo Santos. CHRON.TXT is the table of contents while CHRON.PT1, CHRON.PT2 and CHRON.PT3 make up the rest of the four files. All in Data Library 0.

COMMODORE ART AND ENTERTAINMENT FORUM
(GO CBMART)

Hangman Game—The game of Hangman for the Commodore 64, complete with custom characters and sound effects. Allows you to create your own spelling word lists and store them to disk. File HANGMAN.IMG in Data Library 11.

COMPUTER CLUB FORUM
(GO CLUB)

Recover Sanyo Files—A utility for the Sanyo that allows you to recover erased files as long as you have not overwritten them with other files. File UNDEL.ARC in Data Library 2.

FLORIDA FORUM
(GO FLORIDA)

Vacation Overview—A 1987 overview of Florida's vacation regions. Files are NWFLA.TXT, NEFLA.TXT, CFLA.TXT, CEFLA.TXT, CWFLA.TXT, SEFLA.TXT and SWFLA.TXT in Data Library 6.

IBM COMMUNICATIONS FORUM
(GO IBMCOM)

New RBBS Version—The latest version of the famous RBBS-PC Bulletin Board System for IBM PCs and compatibles. To see all the files for RBBS, type BRO RBBS* in Data Library 4.

File Transfers—A program which runs on an IBM or compatible and permits transfer at 9600 baud of ASCII files from laptops such as the Tandy Models 100, 102 and 200 and the NEC PC-8201a. File FLTIBM.ARC in Data Library 3.

IBM SOFTWARE FORUM
(GO IBMSW)

Today in History—A public domain application that reads your system's date and reports everything it knows about what happened on that date. You may add your own important happenings as well. File TODAY.ARC in Data Library 6.

INVESTORS FORUM
(GO INVFORUM)

Ticker List—A complete list of all the stock market indexes and their respective tickers on CompuServe. Use these for QQUOTE, QSHEET, PRICE and DATA. File INDICE.TKR in Data Library 0.

MAUG APPLE II/III FORUM
(GO APPLE)

Terminal Program—Talk Is Cheap, a shareware terminal program from Don Elton of Carolina Systems Software. The program supports XMODEM, prompted send and more. It works with any Super Serial Card or SSC compatible card and supports the IIc and IIgs serial ports. The files are TIC.BNY for the Binary II version or TIC.DOC and TIC.EXE for those without XMODEM. All files in Data Library 10.

MAUG MAC USERS FORUM
(GO MACUS)

Mailing Lists—The Mac Mailing System, a shareware program for maintaining mailing lists. Will handle a maximum of 2,500 names and addresses. Written in Z-Basic. File MCMAIL.BIN in Data Library 1.

Full-Featured Calculator—A full-function calculator that features calculators for business and finance; hex and binary; and math, science and statistics. Features a timer alarm function, a perpetual monthly calendar until 1999, full five-registry memory and functions. File MEGACA.BIN in Data Library 2.

MICROSOFT FORUM
(GO MSOFT)

Personal Paper—The CompuServe Script for use with Access to produce Personal Paper that compiles a newspaper from online services. For more information, read "The Tailored Tabloid" in the January 1987 issue of *PC WORLD* magazine. File COMPU.SCR in Data Library 11.

Hidden File Remover—A "smart" program to erase programs on MS-DOS machines. Includes the ability to remove hidden files left by copy protected programs that keep you from removing directories. File RM.COM in Data Library 16.

MODEL 100 FORUM
(GO M100SIG)

Appointment Keeper—A program for Tandy models 100 and 102 that has a calendar function and a changing line that shows upcoming appointment times in the NOTE.DO files that have the current date. File CLKCAL.100 in Data Library 4.

David Peyton co-authored How to Get the Most Out of CompuServe. *His CompuServe User ID number is 76703,244.*

Business Briefs

Tickerscreen Provides Data Encryption Standard

Tickerscreen is the first commercial service in the country to use the Data Encryption Standard, which provides an extra level of protection to customers' accounts.

Customers using Tickerscreen Direct Order Entry are protected by DES in addition to their CompuServe User ID numbers and Direct Order Entry numbers. To access Tickerscreen on CompuServe, type GO TICKERSCREEN.

Macintosh Support Expanded

The Macintosh Business Forum now is available to all CompuServe subscribers who have questions about Macintosh business applications.

Applications of the Macintosh in finance, engineering and desktop publishing and more creative uses of applications programs are among forum information files.

The Macintosh Business Forum is the fourth Macintosh-related CompuServe forum. The others include the Apple Developers Forum (GO APPDEV), the Apple User Groups Forum (GO APPUG) and the Macintosh Users Forum (GO MACUS).

To access the Macintosh Business Forum, type GO MACBIZ

Export Information Network Online

CompuServe now operates an online system serving all 52 offices of the US Department of Commerce's International Trade Administration, particularly the department's foreign trade offices.

The system links foreign trade officers with the department's central office through electronic mail and forums that feature conferencing and bulletin boards. The system also provides market research reports, trade opportunities and a schedule of such events as trade shows, which are listed by location.

The service's worldwide online list of foreign trade opportunities is especially helpful. It includes contact name, address and phone number for overseas businesses seeking to establish foreign trade. For more information, contact the Washington Government branch office at 703/524-6900. .

New Tax Law Discussed in Forum

The Computer Consultants' Forum recently opened its Subtopic 8 and Data Library 8 to discuss the implications of the new tax law.

The message subtopic has been opened due to the increased interest in Section 1706 of the Tax Reform Act of 1986.

The Data Library contains archived message threads and information about how the tax law changes will affect computer consultants. Type GO CONSULT at any prompt.

NAIC Forum Debuts

The National Association of Investors Corp. Forum brings to NAIC members and non-members fundamental securities analysis, the study of company financial reports that determine good investment candidates.

Within the NAIC Forum, subscribers will find investment ideas, stock study suggestions, actual financial data from selected companies and information designed to end the mystique of financial reports.

Investment software also will appear in the forum's data libraries. Type GO NAIC at any prompt.

SUPERSITE Offers Enhancement

Minor Civil Divisions now may be specified as geographic markets by name rather than by Census Bureau numeric code in SUPERSITE, the demographic database system. The numeric code also may be used.

After specifying the state and county of an MCD, you can type the full name or a few letters of the MCD. For example, Ashland City in Ashland County, Ohio, may be indicated as "ashland," "ashland city" or "ash."

SUPERSITE displays the MCD containing the letters specified. If more than one MCD contains these letters, a list of possible MCDs is displayed and you may choose one of these names or re-specify.

Name specifications also may be used to request other types of geographic areas including metropolitan areas (SMSAs), Arbitron and Nielsen TV markets (ADIs and DMAs) and places.

To use the new demographic capabilities, type GO SUPERSITE at any prompt. Sample reports are available for viewing at no surcharge.

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COMPARE	100 sh @ 40	300 sh @ 30	1000 sh @ 20
QUICK & REILLY	$41	$ 75	$ 98
Charles Schwab & Co	49	89	122
Merrill Lynch	86	193	357
E.F. Hutton	84	180	399
Dean Witter Reynolds	72	180	360

(Telephone Survey 6/86)

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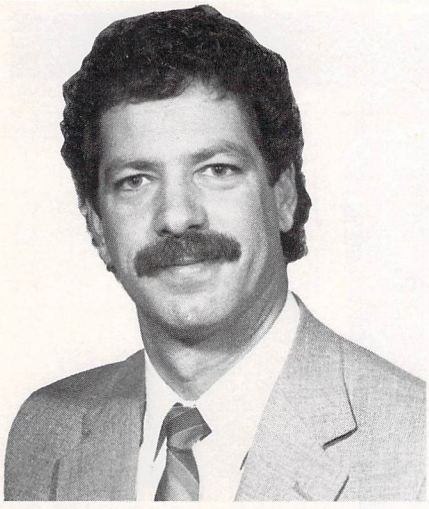

Trimming "information flab": *Nathanson*

Check Your Firm's 'Information Fitness'

No matter how trim your employees look, if they haven't developed the attitudes and skills necessary to effectively handle computerized information, they're technologically flabby, according to Jeffrey M. Nathanson, senior partner of PANA Training, an Albuquerque-based computer training and consulting firm offering a variety of courses and services in information management, telecommunications and online information services such as CompuServe.

Nathanson says four basic steps must be completed before a firm's peak "information fitness" level can be assured. These include developing an information resource management policy, understanding information-age technologies, training employees to increase their productivity and establishing a market position.

This corporate fitness process can take as long as several months. "It takes about five hours a week for six months, for example, to learn to really use and understand a software package such as Lotus 1-2-3," Nathanson says. "Computerizing an office is not just adding hardware and software. A great deal of attention must be placed on training."

Becoming "information fit" begins with listing the duties of individual workers by accounting for every piece of information each handles and then correlating it with that of other workers in the same department. Next, an inventory of resources is compiled in a data dictionary that lists types, sources and applications of information files. Along with this goes an assessment of company goals and the information required to achieve them.

All these items are combined to form a data directory of general categories of information needs that provides a detailed picture of a firm's present information flow and a projection of future needs. Finally, managers must develop a process for organizing and disseminating information so it's available to those who need it.

Nathanson stresses the importance of involving all employees in the "information fitness" process. "Doing so gives them a vs-6oice in clarifying the firm's mission. It also makes them more committed to the need for going through these procedures, and less anxious about the new skills they may have to master, such as information retrieval from commercial databases or handling electronic mail," he says.

Studies show that despite the fact that technology dominates our culture many people still are computerphobic, Nathanson says. "In January 1975 there was a cover story in *Popular Electronics* announcing the first personal computer, invented here in Albuquerque. It has been around only for a dozen years, and we're just beginning to understand its potential. To make the most of that potential, firms need to assess their needs and then train employees to make maximum use of their hardware and software."

PANA Training is located at 1905 Lomas Northwest, Suite 2, P.O. Box 7686, Albuquerque, NM 87194; 505/247-9300.

—Carole Houze Gerber

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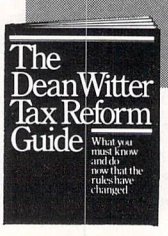

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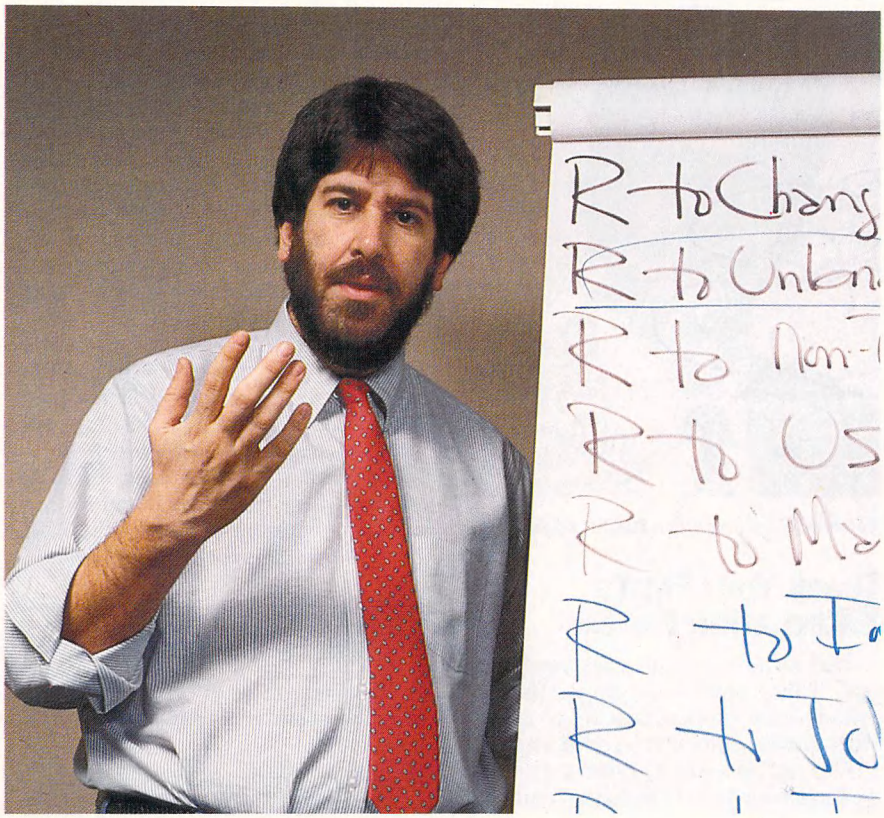
New Forum Links Computer Trainers

Whether you're a professional in computer training or a computer user struggling with a new software package, CompuServe's Computer Training Forum can make your life easier. The network, provided by the National Training and Computers Project of Sagamore Institute in upstate New York, serves as a one-stop source for the latest training developments.

You'll find public domain courseware—similar to public domain software—which includes training outlines developed by others. According to Forum Administrator Elliott Masie, director of the National Training and Computers Project, these outlines will "reduce the amount of time people spend reinventing the wheel."

The courseware covers a variety of topics, including training those who have never used computers, teaching people to use electronic mail, and helping individuals transfer word processing skills from one system to another. Information on the use of such new training technologies as video, videodisc and holography also is included.



Training the trainers: *Masie leads forum for computer instructors*

Notes, lesson plans, training tips and one-page function sheets can be downloaded for use. Valuable tips from training professionals can help companies spend their employees' time wisely.

Overloading trainees with information is a mistake made by many computer trainers, Masie says. For instance, all aspects of using Lotus 1-2-3 usually are taught together when in reality the average user needs only Lotus 1. "If we want to get them up and running, let's teach them less and do it well-so that they become more confident faster," Masie recommends.

If the network's online information doesn't solve your problem, you can participate in an online conference with the forum administrator or other training professionals who are likely to have a solution. The forum administrator tries to match users with others who have faced similar training problems. Frequent conferences with special guests are another source of information.

"The people on this system have responsibility for large numbers of end users," Masie points out. "These people serve as valuable resources to others while reaching large audiences of their own."

In addition to serving professional computer trainers, the service also is helpful to computer programmers and to other technical computer specialists who need to make their programs user-friendly. It aids those involved in large-scale computer automation efforts for major companies and small-business owners who do not employ their own computer-training specialists.

When company trainers use the service to help their out-of-town computer-using employees, they may eliminate long-distance training trips. "I think the courseware will save a lot of money for people in the long run," Masie notes.

To access the Computer Training Forum, type GO DPTRAIN at any prompt on the CompuServe Information Service.

—Kathy Baird

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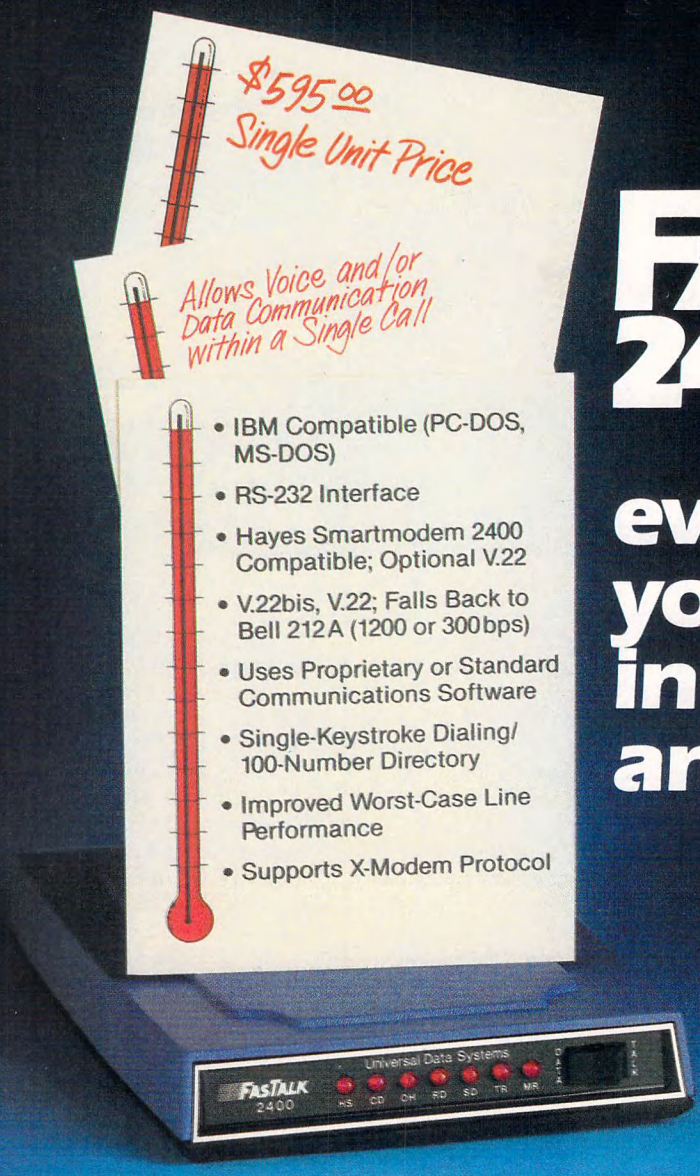
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The modem is supported by SignOn,™ a custom-written communications software package for IBM PC, XT, AT and compatible computers. It features single-keystroke dialing from a 100-number directory and storage of automatic log-on sequences. Fastalk 2400 is also compatible with a number of other communications programs.

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Created by Dayner/Hall, Inc., Winter Park, Florida

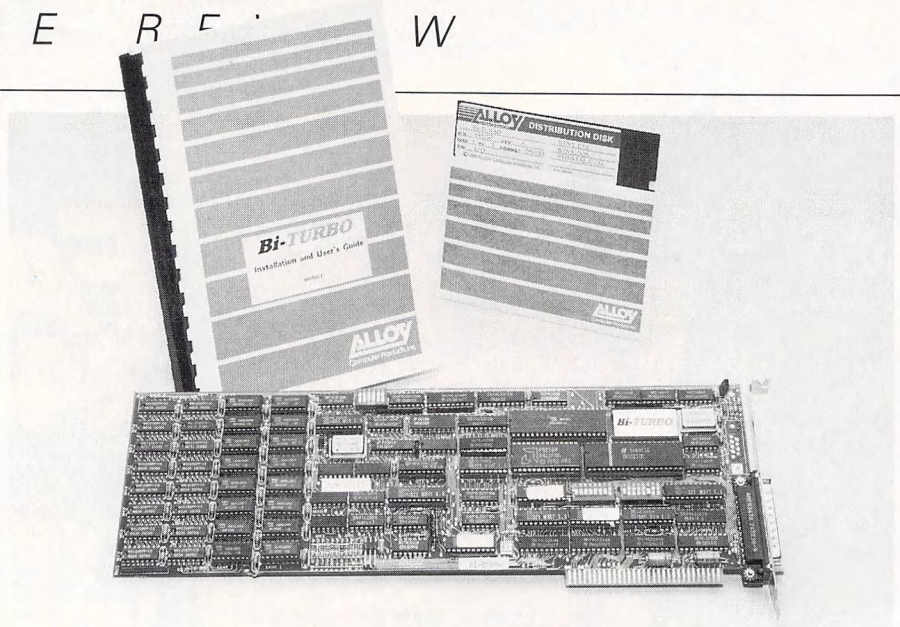
Bi-Turbo

Accelerator Card Has Cache Memory and Multitasking

Alloy Computer Products
100 Pennsylvania Ave.
Framingham, MA 01701
617/875-6100

Computers: IBM PC, PC-XT, PC-AT and compatibles.
Operating System: PC-DOS 3.0 or higher.
Required Peripherals: Hard disk drive.
Other Requirements: 640K RAM recommended.
Optional Items: MATH/16 coprocessor for floating point operation.
System used for test: 640K IBM PC with 20MB hard disk and 360K double-sided, double-density diskette drive; running PC-DOS 3.1.
List Prices: $995 for Bi-Turbo card; $295 for MATH/16 coprocessor.

Reviewed by James Moran



To many IBM PC users, it seemed that as their computers aged, they also become slower. Spreadsheet calculations that once were performed at blazing speeds became maddeningly slow. Information displays that once flipped by at dizzying rates began to look almost lethargic.

Obviously, our PCs haven't slowed down, but our expectations for greater productivity and faster throughput have increased. It didn't take aftermarket manufacturers long to figure out that users would react kindly with their dollars by adding products that could get more speed from the old buggy. Bi-Turbo is one of many accelerator boards that turbocharge IBM PCs and compatibles. However, unlike most other accelerators, Bi-Turbo doesn't rely on a souped-up 80286 processor for speed.

The Bi-Turbo board contains an 8MHz NEC V20 processor, 1MB of RAM and a dedicated serial port addressed as COM2. To control this additional power and the native 8088 processor chip already in the PC, Bi-Turbo is supplied with BTNX (Bi-Turbo Network Executive) software. That software controls the computer and lets it perform two independent but concurrent tasks.

Installing the board is simple since switches are set at the factory and no special cabling is required. The board just plugs into an available full-length slot in the PC.

An optional floating point math coprocessor can be installed on the Bi-Turbo board. However, users can't just order an 8087 chip and plug it in. Instead, an optional MATH/16 coprocessor board from Alloy must be installed on the Bi-Turbo board, and the V20 and 8087 processors then are installed on the coprocessor board. Changes to the PC's motherboard switches are not necessary since Alloy's BTNX software automatically enables floating point support.

BTNX software installation is a little more complicated than installing the hardware. The Bi-Turbo installation and user guide covers the procedure clearly and completely. Although BTNX is installed for what Alloy considers an optimal configuration, users can change default parameters. As configured, the system allocates 640K of the Bi-Turbo memory for the second DOS task that operates on the accelerator board. An additional 256K is assigned to a disk cache, with 16K of the main PC RAM also allocated for disk caching.

Operation of a Bi-Turbo enhanced computer doesn't require much in the way of reeducation. Programs are executed as they normally would be. Using a "hot" key, the monitor screen can be flipped from the host (original) PC to the Bi-Turbo task. Besides providing multitasking capability, BTNX software controls a print spooler, disk space allocation and intertask communication.

Processing speed of the Bi-Turbo enhanced IBM PC was impressive. A Lotus 1-2-3 routine ran in half the time with the accelerator installed. Similar speed-ups were noticed on other processing runs with different software. Much of the speed improvement can be attributed to the cache memory for disk operations.

There are a few minor annoyances in the Bi-Turbo board's operation. Currently, the BTNX software won't operate with an EGA video card. Only IBM monochrome, IBM CGA, Hercules Graphics Card or exact equivalents are supported. Additionally, the Bi-Turbo task always operates as though connected to an IBM monochrome display adapter.

I also noticed some problems when the host task was updating its screen (video RAM) but the Bi-Turbo task had control of the monitor. Garbage (screen characters from the host task) was displayed on the monitor. Alloy is aware of this "write through" problem and suggests that offending programs be run only as Bi-Turbo tasks.

The Bi-Turbo board is an impressive piece of hardware and does speed up an IBM PC appreciably. Although my benchmarks weren't exact, they indicated that most users can expect to operate at or near the 6MHz speed of an original IBM PC-AT. The singular drawback of Alloy's board is its exaggerated price. Whether pricing that is double that of most other accelerator boards can be justified by Bi-Turbo's dual-tasking capability is something interested users will have to determine.

James Moran is the editor of Compu-Syn, *a syndicated news service that specializes in computers and robotics. His CompuServe User ID number is 70007,2253.*

Trademarks: Bi-Turbo, BTNX and MATH/16 (Alloy Computer Products Inc.); Hercules and Hercules Graphics Card (Hercules Computer Technology); IBM, IBM PC, PC-XT, PC-AT and PC-DOS (International Business Machines Corp.); Lotus 1-2-3 (Lotus Development Corp.).

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The Knowledge Network:

An Inexpensive LAN Alternative

Applied Knowledge Groups
1095 E. Duane, #203
Sunnyvale, CA 94086
408/739-0300

Computers: IBM PC, PC-XT and compatibles.
Operating Systems: PC-DOS and MS-DOS version 2.0 and later.
Media: Software supplied on one floppy diskette.
Copy Protection: None.
Required Peripherals: Unused RS-232C serial port on each computer; telephone extension cord with modular (RJ-11) plugs.
Other Requirements: None.
Optional Items: None.
Systems used for test: (1) 704K Heathkit PC-150 with high-resolution color monitor, two double-sided diskette drives, two 20MB hard disks and V-20 processor; using COM2 serial port of Paradise multifunction card. (2) 1408K Tandy 1000 with Tandy CM-2 color monitor, one double-sided diskette drive and 20MB hard disk; using COM1 serial port of Master/Card multifunction card.
List Price: $198 for two computers.

Reviewed by Hardin Brothers

Large offices with many computers often use some kind of local area network (LAN) to hook their machines together. Either one computer or a central file server holds common files that every computer user can share, and expensive peripherals such as high-quality printers also can be used by everyone.

Small offices and even homes with two or three computers rarely can afford the expense of a networking system. The alternative is to move files from one computer to another with floppy diskettes, and to assign peripherals to the computer and user needing them most often.

The Knowledge Network is a low-cost alternative to those approaches. It has many features of a LAN but does most of its work with software. The hardware portion of Knowledge Network is a standard-sized (25 pin) RS-232 connector with no cable coming from it. Simply attach one connector to each computer you want to include in the system, then link the computers together with a normal modular telephone cord. If you're creating a network with two computers, you're done; if you want to add more computers, just buy more phone cords and some three-way phone line adapters to hook them together.

The physical part of Knowledge Network is so simple that anyone should be able to install it in about five minutes per computer. The secret of the system is in the software, which is both complex and easy to use.

One of three programs on the Knowledge Network disk is a device driver that must be installed on the last line of your CONFIG.SYS file. Five optional parameters on the installation line let you specify whether the hardware is connected to COM1, COM2 or a custom serial port. You also can specify how many remote disk drives you want available, the baud rate for the system (9600 baud is standard) and a number for each computer.

Once the device driver has been installed, a second program lets you assign local drive letters to remote disk drives, select the printer you want to use and save the configuration to disk to be loaded automatically during each reboot. A third program locks or releases any disk drive on the system.

When everything is installed, you access files on a remote computer as if they were on another disk drive in your local machine. For example, if you have one hard drive on each of two computers, you could run a program from the other computer by typing D: filename. The Knowledge Network makes DOS believe that the remote drive actually is installed in your computer; all commands for the remote drive are identical to commands you already know.

If you're going to write to files on a remote drive, you must guarantee that no other computer is writing to the same file at the same time. On all networks, it is necessary to lock at least the file or record being changed from other users while one program changes it. Knowledge Network's solution of locking an entire disk drive serves this purpose, but it seems a little extreme and requires each user to remember to lock and unlock the drive.

I found one significant drawback to Knowledge Network. File sharing is relatively slow. Although 9600 baud sounds fast to those of us who use CompuServe at 300 or 1200 baud, it is much slower than normal disk access.

The Knowledge Network slightly slows all computers on the network, whether files are being transmitted or not. When a file is being sent over the network, the sending computer slows to half speed or less. When both of my computers were requesting remote files simultaneously, the entire system slowed to a crawl. However, I imagine that the necessary waits would be tolerable in many office environments, since they wouldn't occur often.

Unfortunately, there is no facility in Knowledge Network for one computer to use a serial device connected to another computer. That is a real handicap for installations with expensive serial devices such as high-resolution plotters.

Despite its few drawbacks, I like The Knowledge Network. Although it isn't as sophisticated or fast as some LANs, it is much less expensive and generally works well. The waits it causes are more than balanced by its ease of use and low cost.

Hardin Brothers is an associate editor of 80 Micro *and a frequent contributor to several other magazines. He is also forum administrator of CompuServe's Writers' and Editors' Special Interest Group (GO WESIG).*

Trademarks: CompuServe (CompuServe Inc.); Heathkit (Heath Co.); IBM, IBM PC, PC-XT and PC-DOS (International Business Machines Corp.); MasterCard (Matthew Electronics Inc.); MS-DOS (Microsoft Corp.); Paradise (Paradise Systems Inc.); Tandy 1000 (Tandy Corp.).

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Electronic Edition Hardware Reviews

The following hardware review is available this month on *Online Today Electronic Edition* by typing GO OLT-220 at any prompt on the CompuServe Information Service.

Compaq Deskpro 286 Computer
Manufacturer: *Compaq Computer*
Computer: *Compaq Deskpro 286 (IBM PC and PC-XT compatible).*

Microfazer II Printer Buffer
Manufacturer: *Quadram Corp.*
Computer: *Computers with Centronics-compatible parallel or RS-232C serial printer output.*

Toshiba P351 Model 2 Printer
Manufacturer: *Toshiba America, Inc.*
Computers: *Computers with Centronics-compatible parallel or RS-232C serial printer output.*

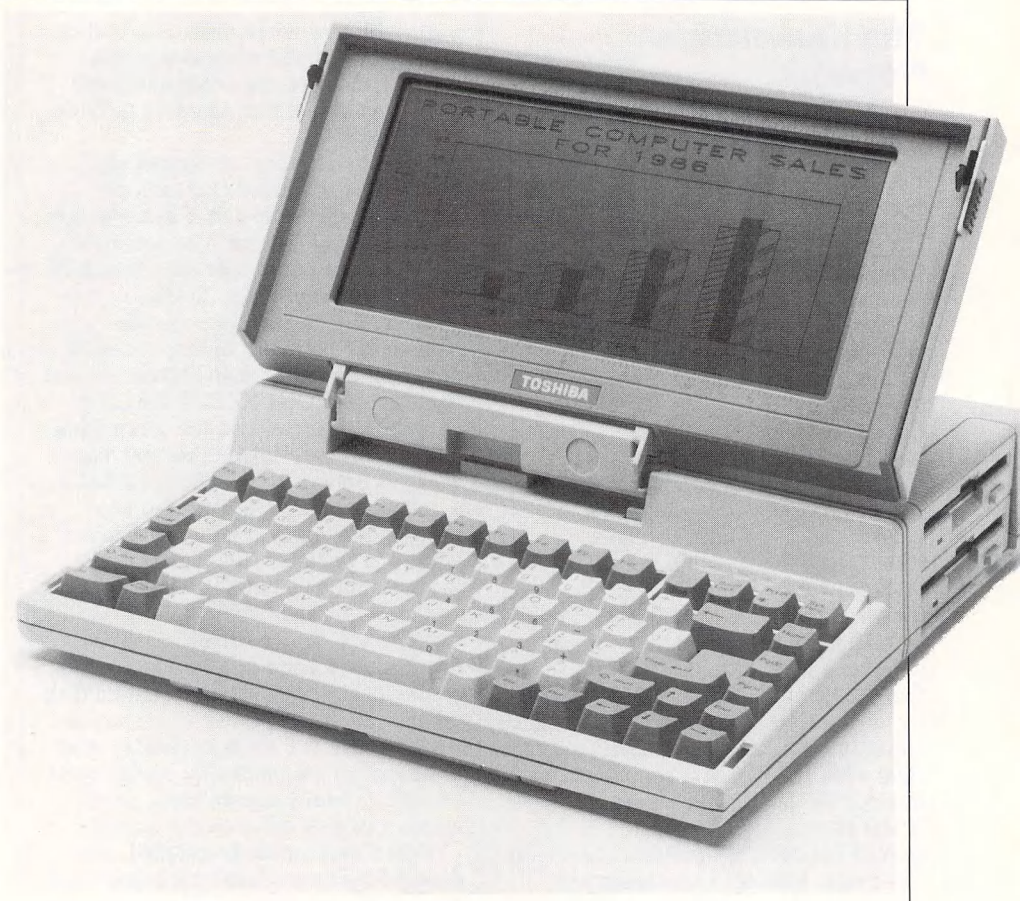
Toshiba's T1100 Plus:

An IBM-Compatible Executive PC

Toshiba America
Information Systems Div.
2441 Michelle Dr.
Tustin, CA 92680
714/730-5000

Computer: Toshiba T1100 Plus Portable Personal Computer.
Operating System: MS-DOS version 2.11 (supplied).
Features: CMOS 80C86 16-bit processor running at 7.16MHz or 4.77MHz clock speed; 256K RAM expandable to 640K; two 720K 3.5-inch double-sided internal disk drives; 80-column by 25-line LCD display with 640 by 200 pixel resolution and screen tilting within 180-degree arc; full-size 81-key keyboard; built-in rechargeable NiCad battery with 110 VAC adapter included; built-in parallel printer port (LPT1), RGB monitor port, composite monitor jack and connector for either external disk drive or serially interfaced device (COM1); switchable display and disk drive selections; includes software for virtual RAM disk plus alternate French, German, British, Spanish and Swedish keyboard drivers; includes carrying case; weighs 9 pounds 15 ounces (without modem) and measures 12.1 by 2.6 by 12 inches.
Options: External 5.25-inch floppy drive ($499); universal Floppy Link for accessing desktop computer's drive ($199); 384K memory card ($499); external expansion chassis ($999); 300/1200 baud Hayes-compatible internal direct-connect modem ($399); automobile power adapter ($29); RS-232C interface cable ($49).
Model Tested: 640K T1100 Plus Portable Personal Computer equipped with external 5.25-inch floppy drive, 300/1200 baud internal modem and Amdek Color 700 RGB monitor; running Toshiba's implementation of MS-DOS 2.11.
Base Price: $1,999 with 256K RAM; $2,399 with 640K RAM; includes MS-DOS 2.11 and Borland's Sidekick software.

Reviewed by Ernest E. Mau



Toshiba's T1100 Plus is a particularly attractive laptop computer with the capabilities most needed by business and professional users. It is fully compatible with software designed for IBM PCs and packs abundant power into a package that fits in an attaché case. Yet it doesn't give up the 80 by 25 display most users demand, and it takes advantage of peripherals such as a printer, external monitor and external drive.

All IBM-style software tested worked well, including word processors, database managers, spreadsheets, communications, graphics and games. As a dual-drive machine with up to 640K of RAM, the T1100 Plus imposes no unusual limits on software. A driver provided for setting up one or more 128K to 512K virtual or RAM disks gives added versatility for applications not needing all installed memory. Occasionally, it is necessary to adapt an installation procedure written for 360K floppies to efficiently use the Toshiba's 720K disks, but that is usually not a problem.

The computer operates at two speeds. Fast 7.16MHz clocking is the default, and slower 4.77MHz clocking accommodates speed-sensitive software. Norton Utilities "System Information" tests show performance indexes of 1.7 and 1.3 times faster than an IBM PC at those speeds (my Deskpro runs 1.7 and 1.0 times a PC's speed). A keyboard combination switches speeds and an LED indicator changes color accordingly.

The unilluminated LCD display is crisp and sharp, with excellent 640 by200 pixel resolution. It responds quickly and cleanly, without disconcerting residual images when scrolling or jumping between displays. It isn't ideal for adverse lighting conditions, but contrast adjustments and positioning through 180 degrees minimize problems in most environments. A keyboard toggle switches between thick and thin character display to enhance readability.

The display packs a full 80 by 25 screen into a 9.1- by 4.7-inch rectangle, distorting some images. So graphics users should choose software with adjustable "aspect" settings to compensate for the short, wide display.

A few color-oriented programs have trouble with the black-and-white LCD screen, failing to differentiate foregrounds and backgrounds. When not correctable by changing programs to monochrome operation, a special memory-resident "CHAD" (change display) program on Toshiba's DOS diskette provides a pop-up menu with

eight display variations. It handled all of the troublesome software I tried.

Built-in ports for composite and RGB monitors are handy when you are not traveling. The display can be switched between the LCD screen and the external monitor by keyboard toggles without stopping or interfering with any programs running at the time.

Although the CGA-style monitor output lacks the crispness of an EGA display, the Toshiba's RGB output is as good of a CGA video as I've seen.

While overall T1100 Plus operating speed is similar to my Compaq Deskpro, there are differences in disk accesses. Sometimes the Toshiba is faster, sometimes it is slower. For example, disk to disk copying and verifying of 34 files took 166 seconds on the Deskpro but 187 seconds on the T1100 Plus. Yet a program needing 13.4 seconds to load on the Deskpro took only 9.4 seconds on the T1100 Plus. Small differences in disk accesses seem to average out and usually aren't critical.

The dual 3.5-inch 720K disk drives may be enough for many users, especially with some software now being marketed on 3.5-inch disks. However, full system flexibility is attained by adding Toshiba's external AC-powered 5.25-inch drive. That gives ready access to software for standard PCs, which often can be copied to 3.5-inch disks.

A switch on the computer swaps the external and lower internal drives, without shutting off the computer, and it lets the external device function as drive A or B. Uncopyable software on 5.25-inch diskettes can be run from the external drive. Since the computer can boot from drive B when there is no disk in drive A, running uncopyable 5.25-inch software that must be in drive A still poses no problem.

However, the external drive connects through the port used for a parallel printer. Thus software running on the 5.25-inch drive cannot output to a printer unless it is connected via the serial port.

The optional 300/1200 baud direct-connect modem slides like a drawer into an opening in the back of the computer and takes about two minutes to install. It has modular phone and line connections, CCITT or Bell 103/212A compatibility, a separate power switch for battery conservation and compatibility with the "AT" command set used by Hayes Smartmodems. It has jumpers that set the DTR and CD signal controls like Smartmodem switches 1 and 6, so some software installation instructions must be adjusted. The modem worked well with a dozen communications programs I tried. It communicates cleanly, without exhibiting any unusual sensitivity to line noise or other interferences.

I feel the T1100 Plus is a little too heavy to hang from my shoulder for long. At somewhat more than 10 pounds with the modem installed, the carrying case strap gets downright painful after about an hour. Yet the machine fits neatly under aircraft seats and in overhead luggage compartments, and it hasn't been harmed by bumps and vibrations during travel.

Battery life was as represented. I achieved the specified 7.5 hours of operating time (without a modem) from 8 hours of charging. Operating time is a function of charging time, dropping to 1.2 hours for a 1 hour charge, but I keep the unit fully charged and operating off AC power whenever possible.

I had trouble adjusting to the compact keyboard that is not like a conventional IBM layout. It took several days of practice before I could type without lots of keying errors, but I did adjust. Still, I missed having indicators for Caps Lock, Number Lock and Scroll Lock keys, especially when switching between numeric and alphabetic functions for designated keys that substitute for a regular numeric keypad.

Nevertheless, I found nothing about the T1100 Plus that would cause me to reject it. It is a marvelous machine, well suited to my traveling needs. While truly portable, it is easily expanded into a sophisticated system when on a desktop. It may not be a direct replacement or substitute for a full-scale desktop machine, but it offers optimal capability in a small package.

Toshiba offers plenty of options, including an expansion chassis for IBM plug-in cards, so users won't outgrow the computer quickly. But the T1100 Plus and its options can become somewhat pricey unless a user has a specific need for a laptop computer. Given such a need, the T1100 Plus is an excellent choice.

Ernest E. Mau, a full-time free-lance writer and Online Today *reviews editor, is based in Aurora, Colo. He is the author of several books and nearly 300 articles on microcomputer products and applications.*

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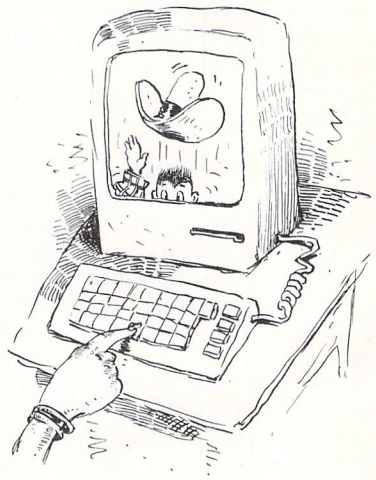

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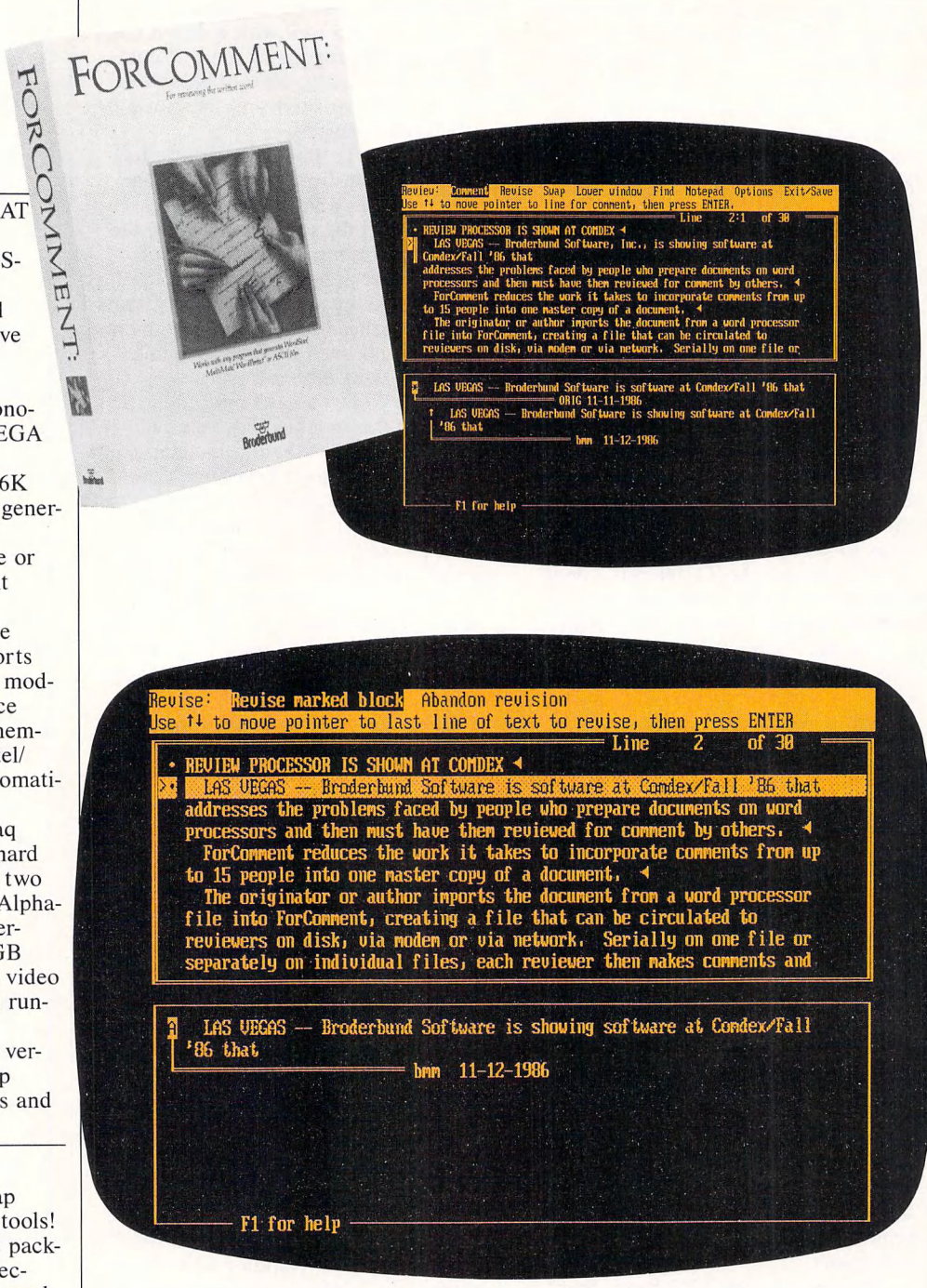
Computers: IBM PC, PC-XT, PC-AT and compatibles.
Operating Systems: PC-DOS or MS-DOS version 2.0 or higher.
Media: Requires two double-sided diskette drives or one diskette drive and a hard disk.
Copy Protection: None.
Required Peripherals: Color or monochrome monitor; MGA, CGA or EGA video adapter.
Other Requirements: Minimum 256K RAM; word processor capable of generating pure ASCII, WordStar-compatible, MultiMate-compatible or WordPerfect-compatible document files.
Optional Items: Additional diskette drives or hard disk; printer (supports more than 100 printer brands and models); additional memory to enhance operation with long documents; memory expansions meeting Lotus/Intel/Microsoft standard supported automatically.
System used for test: 640K Compaq Deskpro Model 2 with 2MB Maynard Accent Expanded Memory Card, two diskette drives, 20MB IOMEGA Alpha-10 Cartridge Drive Subsystem (Bernoulli Box), Amdek Color 722 RGB monitor, STB Systems EGA Plus video adapter and Epson FX-85 printer; running IBM PC-DOS 2.10.
List Prices: $195 for single-author version; $995 for Network/Workgroup version accepting up to 16 authors and one network server.

Reviewed by Ernest E. Mau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ForComment reduces the work it takes to incorporate comments from up to 15 people into one master copy of a document. ◄
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bmm 11-12-1986
F1 for help

At last someone has filled a gap among word processing software tools! ForComment is the first software package for personal computers to effectively address situations where several people correct or comment on documents prepared by others.

As a technical writer, I've spent thousands of hours juggling paper to get feedback on manuals, brochures, reports and other materials. The longer the document, the thicker the paper blizzard. Transcribing comments from a dozen people into one master copy always proves tedious.

With ForComment, reviewers equipped with personal computers can mark a textfile, read memos, annotate files with additional thoughts, and so on. The software then collates comments into a master copy for the author.

ForComment lets up to 15 reviewers work serially on one copy or in parallel on multiple copies. It has security provisions so one reviewer cannot change the comments of another and, depending on the preset security level, may not be able to change his or her own comments from an earlier pass.

An audit trail color codes, initials and date stamps every comment and change automatically. If challenged about why a change might have been made, the author can pull up the ForComment file and isolate clearly logged remarks to identify sources of erroneous input and put the blame where it belongs.

ForComment arrives with four copyable diskettes, namely author, reviewer, utility and demo/tutorial disks. Five reviewer's quick-start booklets are included, with more available if needed.

The author disk contains the full program capable of importing documents from ASCII-, MultiMate-, WordPerfect- or WordStar-compatible files, assigning reviewer lists and passwords and exporting files back to the word processor. Instructions are provided for using two dozen word processors plus spreadsheet, database and other kinds of files. The reviewer disk contains a limited program for marking and commenting on documents but cannot import, export or alter security provisions.

When importing a word processor document as a ForComment file, the author lists authorized reviewers and assigns each a password. The author then circulates copies of that file with copies of the reviewer disk to each person. Reviewers then view the file using their program and make line or block comments and revisions in a screen window. The author's program collates all returned review copies and displays original text in one window and comments affecting lines in another window. By swapping lines between text and comment windows, the author prepares the next draft or final copy. When satisfied, the text can be exported back to the word processor for completion. Throughout this process, the original textfile remains unchanged.

ForComment provides sophisticated cursor movement using its own or WordStar-compatible keystrokes, a useful find function for text and comments, an author's memo pad, note pads for the reviewer, adjustable window sizes and other handy tools. An available 43-line display with EGA video adapters is particularly handy for reviewing and correcting complex documents.

Printing functions provide hard copies in several formats. One prints the current text with proper spacing and headers but without comments. Two others print text with the comments as either page footnotes or endnotes keyed to the text. Additional outputs print note pads, cover sheets or comment and revision pages.

ForComment is beautifully designed for its purpose. It also is quick and responsive. I've imported an 83K WordStar document containing 1,812 lines in 48 pages in just 105 seconds (7.14MHz computer with Bernoulli Box files). However, ForComment's resulting 208K file was 2.5 times larger than the original, so it was necessary to watch disk space and break long documents into manageable pieces for floppy disks.

Using the reviewer's program, it took under 3 seconds to ready the ForComment file for marking. Moving from the first to last lines was almost instantaneous with the entire document stored in expanded memory. Merging two reviewer's files took only 21 seconds, and exporting a finished file to a WordStar file took just 20 seconds.

I found it advisable to strip dot commands and embedded control codes from WordStar files before importing them. That isn't strictly necessary, but commands and codes are imported literally, display in ForComment screens and could confuse reviewers not familiar with them. Public-domain filtration programs for converting documents into ASCII files for modem communications worked well.

I'm impressed! ForComment works well, has excellent documentation and solves annoying problems. It is one package I've adopted as day-to-day working software. If you must have documents reviewed by others, don't miss looking at ForComment.

Ernest E. Mau, a full-time free-lance writer and Online Today *reviews editor, is based in Aurora, Colo. He is the author of several books and nearly 300 articles on microcomputer products and applications.*

Trademarks: Accent (Maynard Electronics Inc.); Alpha-10, IOMEGA and Bernoulli Box (IOMEGA Corp.); Compaq and Deskpro (Compaq Computer Corp.); EGA Plus (STB Systems Inc.); Epson and Epson FX (Epson America Inc.); ForComment (Brøderbund Software Inc.); IBM, PC, PC-XT, PC-AT and PC-DOS (International Business Machines Corp.); MS-DOS (Microsoft Inc.); MultiMate (MultiMate International, An Ashton-Tate Co.); WordPerfect (WordPerfect Corp.); WordStar (MicroPro International Corp.).

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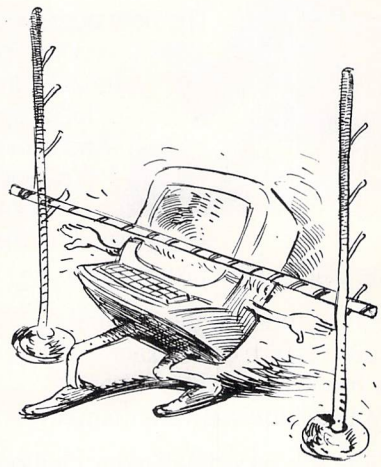

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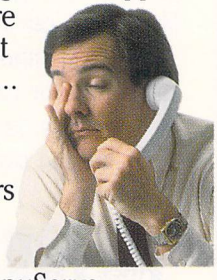

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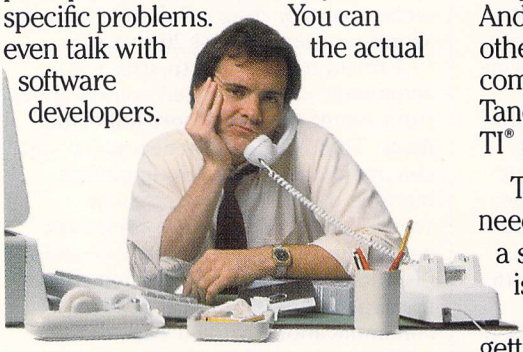

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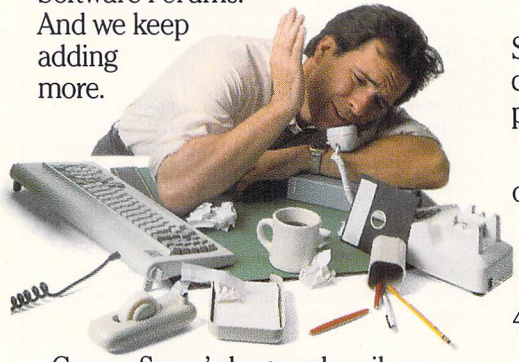

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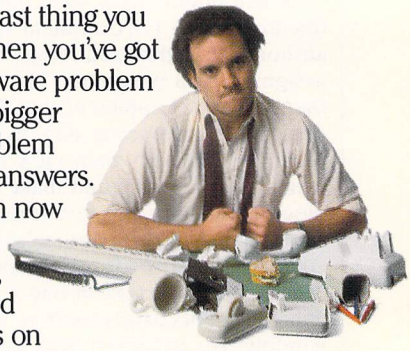

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MaxiPlan

Spreadsheet Program for the Amiga

MaxiSoft
2817 Sloat Rd.
Pebble Beach, CA 93953
408/625-4104 or 800/942-6294

Computer: Commodore Amiga.
Operating System: AmigaDOS and Intuition.
Media: One 3.5-inch disk drive.
Copy Protection: None.
Required Peripherals: Color monitor.
Optional Items: Printer.
System used for test: Commodore Amiga with 1080 monitor and external disk drive.
Retail Price: $150

Reviewed by Cheryl Peterson

MaxiPlan is a spreadsheet program with database and graphing capabilities. It also offers a utility that converts Lotus 1-2-3 files into MaxiPlan files, and a MaxiMerge utility simplifies transporting data from MaxiPlan to other applications. It has most of the features commonly available in spreadsheet programs and uses the mouse and menus for information input.

If you wish, MaxiPlan will audibly and verbally repeat entries or information contained in ranges of cells. This can help in data entry, since mistakes are more obvious when heard. This requires 30,000 bytes of memory space, so it limits the size of the worksheet.

As with other full-featured spreadsheet packages, MaxiPlan requires at least 512K to run properly. In this configuration, it can handle a worksheet reaching 512 rows by 16,384 columns. Inserting rows or columns into the spreadsheet is possible, but you may lose any information contained in the outermost row or column.

While it uses the menu capabilities of the Amiga, MaxiPlan also has many commonly used commands on the function keys. By using both regular and shifted keys, the software offers 20 commands, including cut, copy, paste, change screen colors, print, save, clear, draw chart, specify chart, select cell, insert row and column, select last cell, fill right, fill down and calculate now. The last is used when auto-recalculate is turned off.

Data can be specified as general, dollars, fixed, date or time. Each cell can have the decimal places, commas, pen color, width, alignment and print style (normal, bold, underline, italic or any combination) set. Cells also can be protected so data or formulas cannot be changed inadvertently. These settings can be applied to ranges of cells as well, making it easier to put large sections of a sheet in a similar format. Ranges can be named for easy reference.

Cursor movement is accomplished several ways. Point and click with the mouse can be used on the immediate screen. You also can use the WordStar diamond pattern (CONTROL-S, D, E and X). You can use the scroll gadgets to move long distances. And CONTROL-RETURN will take you to the first column of the next row. By using the Control key with the Arrow key you can move the cursor to the last active cell in the indicated direction.

A special feature of the latest release is the zoom display mode. The entire worksheet is displayed in miniature, each cell being one character wide by two lines high. In this mode you can highlight ranges easily or click on any cell to examine its contents. Clicking on a cell makes it the upper left corner of the active window when you return to normal mode, so this is a fast and accurate way to move the window. Formulas can use all of the normal math operators and many functions are built-in.

Formulas can be typed in or the mouse can be used to point to math symbols at the top of the screen. Cell references in formulas can be relative or absolute.

Data from sheets can be graphed as bar, line, pie or area charts. You then can save these in a format compatible with Deluxe Paint if more detail is to be added. Charts also can be printed from within MaxiPlan.

My only complaint about the program is the documentation. I would have liked more useful tutorial information. The fact that the two-page index is almost adequate indicates how much information is missing from the manual.

Though initially offered with a "key disk" copy protection scheme, MaxiSoft has reconnsidered and now offers the program in an unprotected form that is far more appealing.

Cheryl Peterson, a free-lance writer from Miami Beach, writes reviews for several computer magazines. Her CompuServe User ID number is 72366,2645.

Trademarks: Commodore Amiga (Commodore Business Machines Inc.); Deluxe Paint (Electronic Arts); Lotus 1-2-3 (Lotus Development Corp.); MaxiPlan (MaxiSoft Corp.); WordStar (MicroPro International Corp.).

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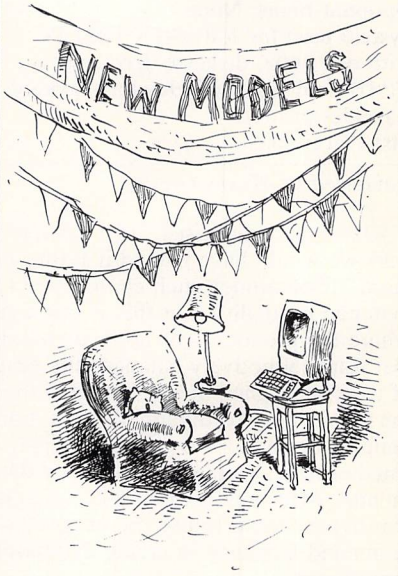

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Trumbull, CT 06611
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Operating System: PC-DOS or MS-DOS version 2.0 or higher.
Media: Requires two 360K diskette drives or one diskette drive and a hard disk.
Copy Protection: None.
Required Peripherals: None.
Other Requirements: Minimum 384K RAM (512K RAM recommended).
Optional Items: None.
System used for test: 640K IBM PC with one 360K diskette drive, one 20MB hard disk and Hewlett-Packard LaserJet printer.
List Price: $600

Reviewed by Harry Green

DataEase advertises "If it wasn't easy we would have named it Data-Hard." Sometimes such claims aren't matched by reality, but this is one case where the product lives up to its billing. DataEase effectively balances the ease of a well-designed menu system with the power needed by applications more demanding than a simple mailing list. Furthermore, you aren't bound by the menus. After you gain familiarity, you can bypass them to use the program's command language to create databases and reports.

Some database management systems make you create the database first and then design the input forms. With DataEase, one step accomplishes both tasks. The form editing mode begins with a blank screen on which you create an input form as long as 16 pages. You can either define fields as you go or create the entire form first and then enter the field definition phase. In this phase, the program automatically suggests a field name from the name you chose on the input form. The name is accepted by pressing the Return key or modified by entering another name. Then the menu asks for field length and field type. Types include text, number, numeric string, dollar, yes/no, date or time.

Numeric strings can be formatted as Social Security number, phone number or a format you specify. After the field is defined, the program offers other choices that can optionally be skipped. With these choices you specify the field as required or optional, indexed, a formula, tested within prescribed limits, derived from another field, automatically sequenced (such as prenumbered invoices) or unique. Unique fields, such as Social Security number, are tested to ensure that no other field in the database contains the same value.

The most difficult part of database design has been simplified by DataEase's methods. If you make a mistake, it is easy to change a field, even after data have been entered. The formatting method is particularly impressive. Many other database management systems make you use a command or procedural language to specify input record editing, but DataEase simplifies the process so nearly anyone can create a simple database with considerable versatility.

The second difficult part of database design is creating report formats. Two report facilities are provided: quick reports and full reports. The quick report procedure lets you choose fields from one or more files to create a report with automatic headings. The full report procedure lets you use a query or procedural language to design to any specified format.

DataEase is a relational database management system, which means that records from different files can be assembled into a single report if the files share a common field. Relationships may be predefined with a relationships form and used to provide data for repetitive reports, or they may be ad hoc relationships defined for one-time reports.

A set of mathematical operators performs calculations. Besides arithmetic functions (add, subtract, multiply, divide) and Boolean functions (less than, greater than, equal, true, false), the program calculates standard error and statistical functions of sum, mean, maximum, minimum, variance and standard deviation.

DataEase provides import and export capabilities to exchange files with Lotus 1-2-3, Symphony, dBase II and any program that supports Data Interchange Format. One feature it lacks is the ability to repack the database when records are deleted. Repacking must be done by backing up and restoring the database.

The DataEase manual is easily understandable and consists of two parts: a quick reference guide and the full reference manual. A tutorial illustrates the major features. After taking the tutorial, I created a database of 11 fields in less than 10 minutes without referring to the manual. It took only a little longer to design two output reports. The ease of design testifies to the logical organization of the menus.

I found DataEase to be among the easiest database management systems of more than a dozen I've used and tested. Its design is logical and clearly documented. It is particularly appropriate for organizations that want to avoid hiring an applications programmer to design the database. Anyone who is familiar with personal computers and understands the fundamentals of database organization should be able to convert an existing application to DataEase or design a new application in minimum time.

Harry Green is a free-lance writer from Portland, Ore. He is author of Automating Your Office *and* Local Area Networks. *A forthcoming book,* Handbook of Telecommunications, *will be published by Dow Jones-Irwin in 1985. His CompuServe User ID number is 70007,431.*

Trademarks: DataEase (Software Solutions Inc.); dBase II (Ashton-Tate Inc.); DIF (Software Arts Inc.); IBM, IBM PC, PC- XT, PC-AT and PC-DOS (International Business Machines Corp.); LaserJet (Hewlett-Packard Corp.); Lotus, Symphony and 1-2-3 (Lotus Development Corp.); MS-DOS (Microsoft Corp.).

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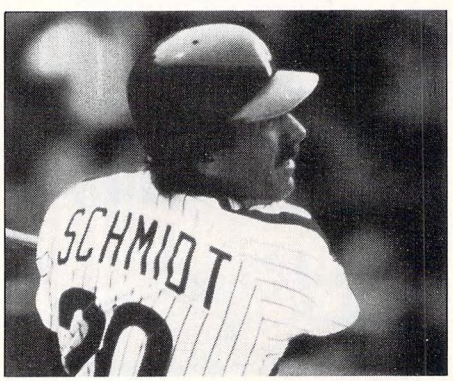

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SoftLogic Solutions
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Manchester, NH 03101
603/627-9900

Computers: IBM PC, PC-XT, PC-AT and compatibles.
Operating Systems: MS-DOS or PC-DOS version 2.0 or later.
Media: Requires hard disk and one floppy diskette drive.
Copy Protection: None.
Required Peripherals: None.
Other Requirements: Minimum 128K RAM. Optional Items: 256K RAM recommended for fastest operation.
System used for test: 640K IBM PC-XT, Hercules Graphic Card Plus, two diskette drives, Maynard 20MB hard disk and Okidata Microline 84 printer; running PC-DOS 2.1.
List Price: $49.95

Reviewed by William J. Lynott

If you've been using your hard disk over a long period, you may have noticed a gradual slowdown when loading files. That is because of the random way DOS handles filing chores.

The DOS unit of storage is called a cluster, usually 4K. Instead of storing each file as a discrete unit, DOS breaks it into clusters and stores them wherever it finds space. Over time, that can mean files have been separated into hundreds or even thousands of separate clusters stored at random throughout the hard disk. When you call up a file, DOS has to scramble around, pick up the pieces and deliver a complete file for loading. That can slow accesses noticeably.

Disk Optimizer is a utility that consolidates all files on a hard disk into consecutive, contiguous storage locations. This, according to the publishers, should restore the original disk access speed.

It is difficult to conduct precise tests of this concept outside a laboratory environment. Since I had no measurements of my hard disk's access times when it was new, I had to confine tests to access times before and after using Disk Optimizer. I came away satisfied that the improvement was significant.

Since I had used my hard disk for only about six months, I wasn't sure access times had slowed enough to show up on the tests. So I used three fairly large Lotus 1-2-3 spreadsheet files to develop an average access time before optimization. It figured out to 11.5 seconds.

After using Disk Optimizer to organize my hard disk, access time for the same three files averaged 7.0 seconds. I had no way to tell if this was as good as the original speed, but the reduction in loading time was a satisfying 39 percent.

Bear in mind that my hard disk probably was not as fragmented as one that had been in use longer might be, and the files I used were not gigantic ones that can take several minutes to load. In such cases, literal savings in time may prove much more dramatic.

Disk Optimizer is easy to use. Just insert the disk, enter "optimize," and select the drive to be optimized. That is all there is to it. On-screen messages keep you posted on the program's progress.

There shouldn't be any risk of losing information with Disk Optimizer since it makes a new copy of each file being optimized before deleting the old one. Just to be sure, though, the owner's manual recommends that you make a complete backup of your disk before you begin. This is especially important if your system is not an IBM model or if it contains non-IBM drives, since there is a possibility of incompatibility.

As a bonus, the program disk also contains a file security program that lets you encrypt files to prevent access by unauthorized persons.

William J. Lynott is president of W.J. Lynott Associates, a management consulting firm in suburban Philadelphia. His CompuServe User ID number is 70007,420.

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Electronic Edition Software Reviews

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Filing System For Apple Writer
Manufacturer: *MinuteWare*
Computers: *Apple IIe or IIc.*

Norton Utilities Version 3.10
Manufacturer: *Peter Norton Computing, Inc.*
Computers: *IBM PC, PC-XT, PC-AT and compatibles.*

Volkswriter Deluxe Plus Word Processor
Manufacturer: *Lifetree Software, Inc.*
Computer: *IBM-PC, PC-XT, PC-AT and compatibles.*

Automenu and HOT Custom Menu Systems
Manufacturers: *Magee Enterprises and Executive Systems, Inc.*
Computers: *IBM PC, PC-XT, PC-AT and compatibles.*

Private Files Database Manager
Manufacturer: *Sofistry*
Computers: *IBM PC and compatibles.*

101 Macros for Lotus 1-2-3
Manufacturer: *Macropac International*
Computers: *IBM PC or 100* compatible; available for DEC Rainbow and HP 150.

PC-Type+ Word Processor
Manufacturer: *ButtonWare, Inc.*
Computers: *IBM PC, PC-XT and compatibles.*

PC Tools Utilities *Manufacturer: Central Point Software, Inc.*
Computers: *IBM PC, PC-XT, PC-AT, PCjr. and compatibles.*

Detente DOS Shell
Manufacturer: *AIRUS, Inc.*
Computers: *IBM PC, PC-XT, PC-AT and compatibles.*

SideStep Prints Sideways
Manufacturer: *SoftCorp, Inc.*
Computers: *IBM PC, PC-XT, PC-AT and compatibles.*

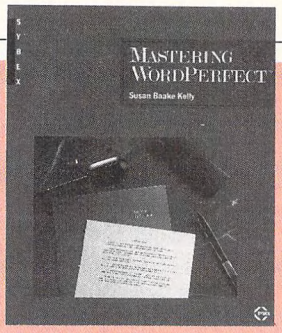
WordPerfect Updated To Version 4.2
Manufacturer: *WordPerfect Corp.*
Computers: *IBM PC, PC-XT, PC-AT or compatibles.*

Mastering WordPerfect

By Susan Baake Kelly
Sybex, 1986
398 pages, $19.95 (softcover)
Reviewed by James Moran

Recently, a number of books have been published about WordPerfect, the best word processor available for the IBM PC and compatibles. Most of the how-to books don't contain much, if any, material that isn't in the manufacturer's manual. The difference is in the way the material is presented. Those familiar with WordPerfect or other word processing software might easily get along with the manual accompanying the software. Others find that a book with a tutorial approach is of more help initially. *Mastering WordPerfect* is such a book.

Unlike books that lean toward office applications of word processing, *Mastering WordPerfect* has a more general orientation. This is not to say that the book can't be used in an office environment, but rather that it will be useful in any environment where WordPerfect is used. Although this book was written for the IBM PC series of computers, it can be used with other less compatible



Sharing WordPerfect tips: *Kelly*

hardware, such as that supplied by TI, DEC, Tandy, Data General, Victor and Apricot.

Mastering WordPerfect is organized into three sections and a group of appendixes. The first section is a basic tutorial exploring fundamentals. This section would be particularly useful to those who have never used a word processor before and are unfamiliar with even the most basic concepts. Readers learn how to create, edit, format, print and save commonly used documents. All of the basic WordPerfect functions are taught in this first section, and readers can choose among the book's other chapters as they see fit.

The second part of the book covers advanced word processing functions. In addition to advanced formatting functions such as hyphenation, headers and footers, custom screen codes and page lengths, chapters in this section teach more exotic features. Readers learn how to use the search-and-replace function, control printer output and compile indexes, lists and outlines.

Supplemental features of WordPerfect are taught in the third section of the book. Utilities such as sorts, line and box drawing and the spelling checker (and thesaurus) are explored. Document locking and the many file management functions also are explained. The appendixes describe installation methods and system requirements. They also summarize WordPerfect commands and functions.

Each newly published book about WordPerfect seems to eclipse the last. This particular book includes all of the enhancements through version 4.1 and is by far the most comprehensive tutorial I've seen. Kelly has written an excellent book that will be useful to both novice and experienced users of WordPerfect.

James Moran is the editor of Compu-Syn, *a syndicated news service that specializes in computers and robotics. His CompuServe User ID number is 70007,2253.*

Operating the IBM PC Networks

By Paul Berry
Sybex, 1986
363 pages, $19.95 (softcover)

Reviewed by Harry Green

Every year of this decade has been predicted to be the one in which local area networks will finally come into their own. It was widely believed that the long-awaited arrival of the IBM token ring network in 1985 would make 1986 the year of the network, but so far the revolution has been rather tame.

This book explains one possible reason: implementing a PC network is not a trivial task. It isn't like taking home a PC, booting DOS and feeding in your favorite application program. As Berry demonstrates, the network must be planned, designed, installed and managed the way you manage any shared resource.

Many books have been written about the theory of LANs, but few on the specific techniques of implementing them. Berry covers the theory with a short appendix. The bulk of the book is an explanation of what you must do to install either the IBM token ring or PC networks and place them in service. I was surprised to learn that the two networks have so much in common. They use diverse technology, but they share common operating techniques so their differences are transparent to the user. Berry discusses them, pointing out where they diverge.

A LAN has two primary purposes: sharing resources, such as files and printers, and communicating between attached devices. Berry focuses on sharing. Chapters explain how to designate your PC as a file server so others can access files and software that reside on your fixed disk. Another chapter explains how to operate as a print server. Other chapters describe how to access files and printers on other machines.

Some of the most valuable information in the book describes the operational aspects of tending printers, protecting confidential files, suspending permission to share your resources and initializing the network. Although I have never operated a PC on either of these networks, I believe I could install and implement a network from Berry's instructions. Although the initialization and set-up are complex, the book describes how to traverse the menus and explains the implications of the different options.

From a structural standpoint, the book is readable. Terminology is explained in context, and a glossary provides additional clarification. The organization is logical. The first half explains how to operate the network, and the second half how to install it. Even though installation precedes operation, the network will have more operators than installers, so most people can learn all they want to know from reading only the first half.

This book is recommended for anyone thinking about implementing one of the IBM networks. If you are interested in knowing what the network does but not how it does it, you'll find this book a valuable reference.

Harry Green is a free-lance writer from Portland, Ore. He writes about telecommunications, office automation and personal computer-related topics. His CompuServe User ID number is 70007,4v31.

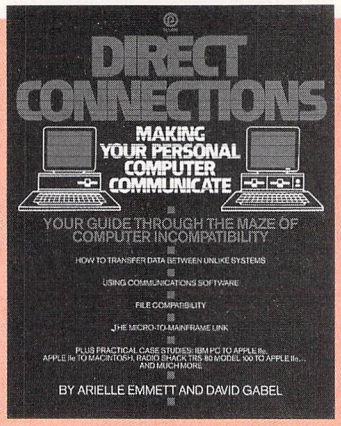
Direct Connections:

Making Your Personal Computer Communicate

By Arielle Emmett and David Gabel
Plume, New American Library, 1986
330 pages, $22.95 (softcover)
Reviewed by Darrow Kirkpatrick

Microcomputer communications is an important issue and becoming more so. Even if you don't remember the days of trying to get CP/M machines, Apple IIs and TRS-80s to talk to one another—the days when buying a printer meant spending hours fiddling with break-out boxes and software patches to make it talk to your computer—you can appreciate that local area networks and micro-to-mainframe communications are hot topics in the microcomputer world.

The authors of *Direct Connections* attack the communications "Tower of Babel" head on. And while they don't entirely succeed in making computer communications understandable, they write so clearly, present such a sweeping overview of the subject and provide so many useful references that their book becomes an interesting and valuable resource.


DIRECT CONNECTIONS
MAKING YOUR PERSONAL COMPUTER COMMUNICATE
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USING COMMUNICATIONS SOFTWARE
FILE COMPATIBILITY
THE MICRO-TO-MAINFRAME LINK
PLUS PRACTICAL CASE STUDIES: IBM PC TO APPLE IIe, APPLE IIe TO MACINTOSH, RADIO SHACK TRS-80 MODEL 100 TO APPLE IIe... AND MUCH MORE
BY ARIELLE EMMETT AND DAVID GABEL

Connecting: *Emmett and Gabel*

Emmett and Gabel are concerned with the rules, protocols and standards governing computer communications. Unfortunately, these "standards" serve more as frameworks for understanding data communications than as practical guides to the interfacing process.

The first chapters define a conceptual model that can be used to troubleshoot connections. The book then covers the incompatibilities and communications problems that stem from different operating systems and disk and file formats.

The authors do their best to explain the much-abused RS-232C standard, originally developed for communications between terminals and modems. However, they do not discuss data flow control using line signals—called "hardware handshaking"—because microcomputers are usually able to keep up with each other during file transfers.

The book explores connecting computers both with modems and directly. The direct-connect method follows two basic steps: establishing the physical link layer of communications and then

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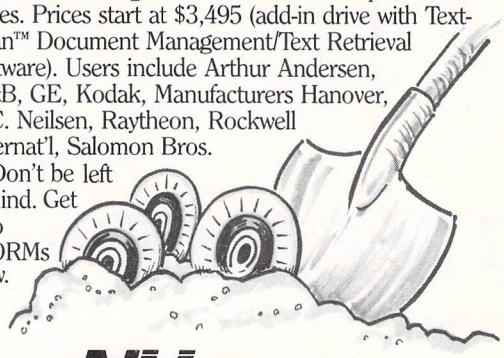

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establishing the data link or software layer.

The book outlines a useful "general solution" for direct-connecting two computers by their RS-232 ports using a special cable that prevents hardware handshaking. As soon as one computer is ready to send data, the cable fools it into thinking the other computer is ready to receive. This gets you in the door with a working physical connection between two machines; the necessary protocols to successfully transfer data are then left to software. For situations in which the general solution doesn't work, there are diagnostic strategies and over 20 case studies with many different brands of machines.

Direct Connections has a split personality: On one hand it is full of broad generalities about the complex subject of computer communications, especially in the chapters on networking and micro-to-mainframe connections. On the other hand, it is crammed with specific technical goodies: case studies, wiring diagrams and recommendations for communications hardware and software.

Direct Connections will find an audience with two groups: users with a need for getting different brands of microcomputers to talk with one another and management-level decision makers who need a broad overview of communications topics.

Darrow Kirkpatrick is an independent computer consultant and technical writer living in Rosendale, N.Y.

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ONLINE TODAY

Applying Expert Systems in Business

By Dimitris N. Chorafas
McGraw-Hill, 1986
232 pages, $29.95 (hardcover)
Reviewed by William J. Lynott

Just what is artificial intelligence? Does it exist now? Will it ever exist?

It depends on whom you ask. In *Applying Expert Systems in Business*, Chorafas defines AI as "...a scientific field concerned with creating computer systems that can achieve a human level of sensory activities and reasoning." In other words, making computers think and reason the way humans do.

Some scientists insist that such an achievement is unlikely, if not impossible. Everything that has been done so far, they say, is a sadly lacking, futile attempt to replicate human reasoning power. There is still debate among scientists about such elemental concerns as what is really meant by the term artificial intelligence.

All that aside, there is little doubt that computers can be endowed with specific knowledge furnished by experts in given fields, and that this knowledge can be incorporated into existing software technology to create so-called expert systems. The idea is to create a decision-making process enhanced by human knowledge, but carried out by the impassive creatures we call computers.

As we learn from *Applying Expert Systems in Business*, these systems exist today, and are being used in various manufacturing and engineering applications —some with impressive success.

Applying Expert Systems in Business covers a breathtaking scope in this new field. It isn't the sort of book that can be appreciated from a once-over-lightly approach. If you are a business manager concerned with such concepts as computer-aided design or decision support, you'll find a lot to think about within these pages.

The early chapters discuss the concept of decision support and office automation environments, including micro-to-mainframe networking. Chapter 1 contains a discussion of the responsibilities of top and middle management in business and how they relate to modern information systems.

In Chapter 2, the author describes expert systems and explains what they can do. He also includes a number of case studies showing how expert systems have been used in the past.

In Chapter 3, you will get a look at a three-decade-long search for true artificial intelligence and how we might expect to see it implemented in the future.

The book includes discussions on such concepts as knowledge engineering, the languages and shells used in expert systems and the problems encountered in human-machine communications. You will be introduced to the concept of interactive videodisc systems and their applications in training situations.

Applying Expert Systems in Business discusses highly technical subjects, but it is written in a style that makes them relatively easy to digest. Dr. Chorafas is a distinguished computer scientist, eminently qualified to write on these subjects. While this book will have a narrow audience, those who are interested in learning how expert systems can be put to work in business will find it to be both interesting and valuable.

William J. Lynott is president of W.J. Lynott Associates, a management consulting firm in suburban Philadelphia. His CompuServe User ID number is 70007,420.

Electronic Edition Book Reviews

The following book reviews are available this month on *Online Today Electronic Edition* by typing GO OLT-240 at any CompuServe Information Service prompt.

A Comprehensive Guide to AI and Expert Systems, *by Robert Levine, Diane Drang and Barry Edelson, Byte/McGraw-Hill.*

Tools for Thought: The History and Future of Mind Expanding Technology, *by Howard Rheingold, Prentice-Hall.*

Advanced MultiMate and MultiMate Advantage, *by Mark Brownstein, Osborne/McGraw-Hill.*

Advanced Techniques in dBase III Plus, *by Alan Simpson, Sybex.*

Commodore 128 Peeks & Pokes, *by Hans Joachim Liesert and Rudiger Linden, Abacus Software Inc.*

Programming Languages:

A Grand Tour

Edited by Ellis Horowitz
Computer Science Press, 1987
512 pages, $39.95 (softcover)
Reviewed by James Moran

Programming Languages is an anthology of articles that have been published elsewhere. An interesting method has been used in reprinting the original articles: In an effort to prevent errors from creeping into the new text during the transcription phase, this entire process was eliminated. All articles seem to be in their original form and typeface with little, if any, editorial changes. The process may have ensured accuracy, but there are a few instances where the original was of such poor quality that it did not reproduce well.

This anthology represents 30 years of programming language studies. Beginning with a historical perspective of the languages, *Programming Languages* catalogs the design, appearance and use of 11 major languages: FORTRAN, ALGOL60, COBOL,LISP, SNOBOL, APL, PL/I, ALGOL68, Pascal (N. Wirth, Pascal's developer, has a number of articles reproduced), SIMULA and IPL-V. Other sections report on the development of newer languages such as Ada, Prolog, FORTRAN77 and the many flavors of BASIC.

What can you say about an anthology other than whether or not it is comprehensive? This one is, but to an extent that casual readers will find too much effort is required for too little information.

Programming Languages, according to its editor, a professor of computer science on the West Coast, was originally meant to be used for a university course on comparative programming languages. I found it long-winded, lacking in continuity and boring. Pity the student required to read this potpourri. Perhaps I've found another facet to the publish or perish rule in our universities. Obviously, someone made the wrong choice.

James Moran is a free-lance writer and frequent contributor to Online Today. *His CompuServe User ID number is 70007,2253.*

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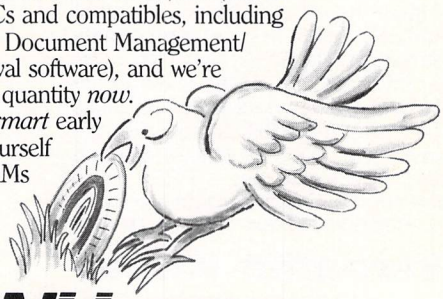

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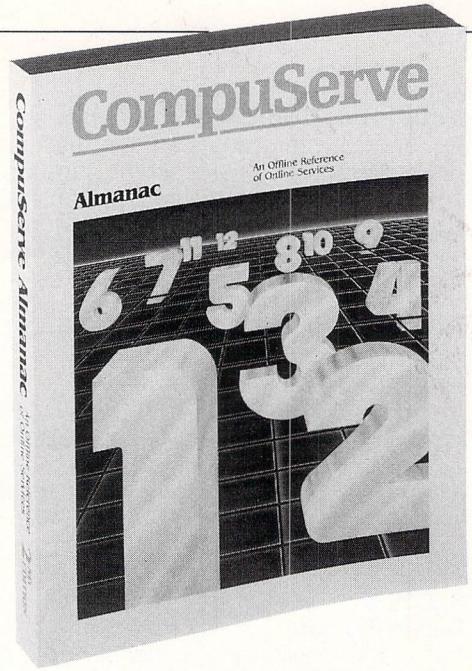


Product Almanac Updates Keep Users Up-to-Date

Since the CompuServe Information Service is constantly changing, the following pages are provided as a supplement to the *CompuServe Product Almanac*. *Almanac* updates will appear periodically in *Online Today*.

The *CompuServe Product Almanac* is a handy reference source describing the forums and databases on the CompuServe Information Service. By checking the *Almanac*, you can navigate the service more quickly. To order a copy of the *CompuServe Product Almanac*, type GO ORDER.

3.3.2.11
Space Education Forum **SPACEED**

Teachers, motivated students, and anyone interested in the development of space-related curriculum in the classroom can exchange resources and ideas in the Space Education Forum. The agenda coincides with the Teacher in Space Education Foundation, directed by NASA's Teacher in Space Program. Members can discuss topics such as the use of innovative technology in the classroom and the direction for future education in the United States.

3.3.5.2
National Association of Investors Forum **NAIC**

The goal of the National Association of Investors Forum is to educate long-term investors in how to find quality companies and buy stocks at good prices. Well managed companies are identified from reported financial data and in-depth analysis. Members can share information on portfolio management, software and favorite stocks.

3.3.6.11.6
Tangent Forum **TANGENT**

Tangent is the forum for business users of Tandy computers. Members have access to up-to-date technical information, support and input. You can keep informed through bulletins, public message boards, conferences and member discussions. Data libraries contain downloadable public domain software, product reviews, reports and journal abstracts. The emphasis in this forum is on Tandy Model 2/12/16/600 but, of course, everyone is welcome.

3.3.6.11.7
Fort Worth Computer Chronicles **FWCC**

Tandy computer users have a forum for news, views, information and humorous articles. Members can read electronic excerpts from the RAMparts newsletter, PRO-Color File UG newsletter and the OS-9 Users Group newsletter. If you have a story to tell, you can contribute to the chronicles through the Feedback option. The Fort Worth Computer Chronicles is published by the Golden Triangle Corp. of Fort Worth, Texas.

3.3.8.1
Aquaria & Tropical Fish Forum **FISHNET**
Aquarium professionals and hobbyists alike can join the Aquaria & Tropical Fish Forum to talk "fish." Members of fish specialty groups can exchange information on products, diseases and news. Join a live conference and meet fellow fish fanciers across the country.

Regular conferences are scheduled with some of the nation's best-known aquarists. Questions left for the SYSOP will be answered within 24 hours, but if you can't wait, a voice line is available.

3.3.10.1
AI Expert **AIE**
AI Expert is a forum for readers of *AI Expert* Magazine and those interested in artificial intelligence. In this forum, you can query industry and academic leaders in the AI field and exchange AI information with other members. As a member, you have access to public domain expert systems and software. Articles, bibliographies, news and product reviews are available.

3.3.10.6
Cadre Forum **CADRE**
The Cadre Forum is for users of Applied Data Research products such as ROSCOE, VOLLIE, IDEAL, ETC and EMAIL. Members can have debates, exchange messages and participate in live conferences. Bulletins keep members informed about the Cadre Forum and coming events. Data libraries contain reports, software and product reviews.

6.1.1.1.2
Inside * Outside **IO**
Browse through a fantasy collection of intimate apparel and gifts. Both men and women can choose lingerie, accessories and at-home wear in silk, satin and cottons. All items are packaged in gift boxes with card enclosures.

6.1.1.1.3
L'eggs/Hanes Outlet **LH**
L'eggs Brands, Inc. offers substantial savings on slightly imperfect pantyhose, hosiery, bras and underwear. Excellent values also can be found on L'eggs® and Hanes® brand first-quality merchandise, such as specialty pantyhose, activewear, panties, socks and sweat suits.

6.1.1.1.5
Woodstock Leather Co. **BAG**
Treat yourself to the affordable luxury of a handcrafted, full-grain natural leather bag, briefcase or backpack. Each piece is made to order. With WLC's customization and design-your-own services you can add pockets or compartments to the standard designs, or have them create a design to your personal specifications.

6.1.1.2.2
Chevy Showroom **CHV**
Whether you're looking for a part for your '57 Chevy or selecting a new model, the Chevy Showroom can help. Through the great Chevy Swap Meet, you can advertise vehicles and parts "wanted" or "for sale" and exchange information. The Vehicle Recommendation Service surveys your needs and recommends models. You can access information on the latest model lineup, options and suggested prices. And you can learn about upcoming motor races and auto financing and shop the Chevy Shopper for exciting Chevy products.

6.1.1.2.4
Ford Motor Company **FMC**
The Ford Motor Company Electronic Showroom gives you the latest product news and information on automotive subjects and information on Ford's product lineup, manufacturers' suggested retail prices and optional equipment. The Electronic Showroom can help you locate the dealer nearest you and select the car or truck that suits your needs.

6.1.1.3.1
Ballantine Books **BAL**
Armchair adventurers, look no further. The worlds of mystery, science fiction, humor and best sellers are at your fingertips. Non-fiction, business and reference books also are available for those who take life seriously.

6.1.1.4.3
Great Lakes Business Forms **GL**
While some companies sell business forms as a sideline, Great Lakes Business Forms specializes in stock forms for the commercial, financial and industrial communities. All items offered online are packaged in small quantities, and most products are priced under $15 to fit home budgets.

6.1.1.4.6
ICON Review **IR**
Macintosh users now can buy the best productivity tools available for the Mac at low discount prices without standing in line. Discover new software for graphics, publishing, education, communication, number crunching and more. Upgrade your system with disk drives, backups, modems and accessories. All items are guaranteed by the manufacturer.

6.1.1.4.7
Investment Software **IS**
Investment software is the next best thing to having an investment consultant at your fingertips. Primarily for IBM PCs, the available software covers technical analysis, portfolio management, options, bonds, commodities, real estate/taxes and games/simulations.

6.1.1.4.9
Menu International **MNU**
Menu is the international software database information and ordering service for any computer software, for any system—Apple to Zilog, for any subject—Astronomy to Zoology. If you can't decide among the hundreds of software choices, a printed report describing the software that meets your requirements can be produced.

6.1.1.4.13
CDA World of Computers **WOC**
CDA World of Computers has become one of America's largest mail-order companies because of its prompt shipping, excellent prices, knowledgeable sales people and technical support lines. In addition, CDA World of Computers has a unique, 30-day money back satisfaction guarantee. Its catalog features PCs, printers and other accessories.

6.1.1.5.1
Beneficial National Bank **BNB**
You can apply for a no annual fee MasterCard® or VISA® credit card from Beneficial National Bank USA. Select from a Classic VISA® or MasterCard® or a Premier VISA® or Gold MasterCard®. Use the Beneficial National Bank USA Credit Card Analysis program to determine which type of credit suits your financial needs.

6.1.1.5.2
Business Incorporating Guide **INC**
If you're considering incorporating a business, the Business Incorporating Guide can help by providing up-to-date information about incorporating anywhere in the United States and an online order form. Corporate Agents, Inc., a nationwide incorporating service, sponsors the Business Incorporating Guide.

6.1.1.5.4
Dean Witter Reynolds **DWR**
Dean Witter Reynolds provides investment and financial services to corporate, institutional and individual investors in the United States and overseas. Test your knowledge through a variety of online quizzes. Learn about the future cost of college education and retirement, and find out how to plan for them. Investors can request Dean Witter's Recommended List, the only publicly audited stock recommendations on the Street. Have your investment questions answered by a Dean Witter Account Executive through the Open Line for Your Questions. Free brochures are available to help you plan your financial future.

6.1.1.5.6
First Texas Savings **FT**
Texas is one of the most competitive financial markets in the nation. As a result, First Texas Savings pays you high interest rates on savings and investments. Established in 1890, First Texas Savings is a full service financial institution. Telebanking representatives are available electronically or by toll-free telephone to answer questions or help you set up the IRA, CD or Money Market accounts that are best for you.

6.1.1.5.7
H&R Block **HRB**
H&R Block is the world's largest income tax service, preparing one out of every 10 individual income tax returns in the United States. You can learn about Block's history and the many services provided, including Tax Forecaster, a written analysis of how the new tax laws affect you, and Rapid Refund, Block's electronic filing program. Also included are answers to tax questions, tax saving tips and a comprehensive list of changes brought about by the Tax Reform Act of 1986.

6.1.1.6.1
Alaska Teleshopper **AK**
Visit America's last frontier without a dogsled. Alaska Teleshopper offers you the opportunity to shop for Alaskan treasures such as arts and crafts by Alaskan artists, gold, publications, pictures, T-shirts and salmon gift packs. Discover information on all types of adventure travel including hunting, fishing or sightseeing tours and even prime Alaskan real estate.

6.1.1.6.2
Coffee Emporium **COF**
A family owned and operated old-fashioned coffeehouse is as close as your keyboard. The Coffee Emporium, located in the San Francisco Bay area, promptly fills orders using the highest grade gourmet coffee beans, Arabica AA & A. In addition, Coffee Emporium carries a complete line of gourmet teas, coffee samplers and coffee and tea-making accessories.

6.1.1.6.3
Executive Engravers **EX**
Give a unique and personal gift to that special person. Choose from a catalog of gifts and type styles from Executive Engraver. Items range from plaques, trophies and baseball caps to brass card cases, office door signs and rubber stamps.

6.1.1.6.6
Hawaiian Isle **HI**
A unique selection of Hawaiian products, including floral arrangements, tropical plants, Hawaiian gourmet treats, fragrances, books, clothing and gifts is available. Information on Hawaiian Isle Adventure is also available upon request.

6.1.1.6.8
Lincoln Manor Baskets **LM**
Individualized baskets are a simple, elegant expression of gratitude, celebration or thoughtfulness. Each basket is individually designed and assembled from the finest products: Crabtree & Evelyn bath and food products, fine chocolates, gourmet foods, and unique gift items. Baskets are available for new babies, get well wishes, congratulations and to say thank you. Seasonal holiday baskets also are available.

6.1.1.6.10
Tooth Fairyland **TF**
Yes, the Tooth Fairy has entered the electronic age. Commemorate that once-in-a-lifetime moment of losing that first tooth by making it official. The First Tooth Loss Gift Package includes a certificate from the Tooth Fairy Documentation Center, an official Tooth Fairy Lost Tooth Alert Light and a T-shirt that proclaims, "I just lost my first tooth."

6.1.1.6.11
Walter Knoll Florist **WK**
If you forgot someone's birthday or just want to say "thanks," flowers can deliver your message, usually within 24 hours. Walter Knoll offers a wide selection of arrangements including holiday bouquets, bud vases, corsages, fruit and flower baskets, planters, balloon bouquets and special orders just for you.

6.1.1.7.2
Merle Norman Cosmetics **MN**
Merle Norman Cosmetics is the largest chain of independently owned retail cosmetic studios in the world. Order quality skin care products, cosmetics and vitamins directly from Merle Norman. All products are dermatologist-tested and your satisfaction is guaranteed.

6.1.1.8.2
Hobby Center Toys **HC**
Good news for kids of all ages! Hobby Center Toys has an exciting collection of toys, games, stuffed animals, and pre-school delights. Hobby items such as model trains, kits and radar control toys also are available.

6.1.1.8.4
New England Habitats **NH**
If your pets could talk, they would ask you to shop from New England Habitats. Discover a full line of pet supplies such as grooming tables, flea sprays, shampoo, litter boxes, catnip, filters, pumps, bird and hamster cages, rabbit hutches, reptile heaters and more.

6.1.1.8.5
QualiToy **TY**
QualiToy's managers believe that playtime can be used to develop positive qualities in your child. Discover a selection of educational toys from around the world that will encourage curiosity and learning, and provide rewards for your child. Games, puzzles, wooden trains, and arts and crafts from the United States, Sweden, Holland, England and the Orient are available.

6.1.1.8.7
TSR Hobby Shop **TSR**
Fans of adventure games can stop their searching because TSR Hobby Shop has what you need. Discover rules, accessories and books on *Dungeons & Dragons* and other simulation games. Adventure novels, science fiction games and miniatures also haunt their shelves.

6.1.1.8.8
Vacuum Advance **VCS**
Vacuum Advance, the catalog of the Two Wands Vacuum Cleaner Shoppe of Brockport, N.Y., has made the purchase of a vacuum cleaner or sewing machine as easy as pushing a button. Choose from Eureka, Miele, Panasonic, Royal or Riccar vacuum cleaners and Diamond Series sewing machines from New Home.

6.1.1.9.2
AT&T **ATT**
AT&T Search has three parts. Search Central gives an online catalog of telephone and answering systems, computers, long-distance services and do-it-yourself accessories. Search Guide offers personalized assistance in choosing the products and services that suit your needs. And Search Contest is a monthly challenge providing fun and prizes.

6.1.1.9.3
CompuServe Store **ORDER**
The CompuServe Store is the ordering service for CompuServe products. Order the CompuServe Almanac, Users Guides, software, posters, books, T-shirts and more. Make the best use of your time by knowing what's on the CompuServe Information Service and how to use it.

6.1.1.9.4
Crutchfield **CFD**
Request a free copy of the renowned Crutchfield catalog of high quality, name-brand consumer electronics including audio/visual equipment, telephones, security products, car stereos and more. All products come with a 30-day guarantee.

6.1.1.9.6
Office Machines & Supplies **OM**
Office Machines & Supplies Co. sells and services IBM office equipment and AT&T, Royal, Olivetti and Sharp equipment. The inventory includes typewriters, ribbons, supplies, computers, printers and copiers.

6.1.1.9.7
Sunland Camera **SUN**
Sunland Camera helps capture those moments by offering quality photographic equipment including Canon, Nikon, Minolta, Pentax, Ricoh, Kodak, Polaroid and Vivitar. Film and batteries also are available.

6.1.1.12.3
Neiman-Marcus **NM**
Neiman-Marcus is synonymous with distinctive merchandise of the finest quality. Select from a variety of apparel, jewelry, home accessories, gourmet treats, children's gifts and more. Open a Neiman-Marcus charge account, arrange a wedding gift registry or order a print catalog.

6.1.1.14.2
Ameropa Travel **AT**
Travel to London, Paris, Rome, Frankfort, Amsterdam, Brussels, Milan, Geneva, Zurich or Munich from more than 20 gateways within the United States on full-service flights at super low fares. Flexible options include one-way or round-trip reservations, or flying into one city and returning from another. Check schedules and make reservations the easy way.

8.7.3
Science Trivia Quiz **SCE**
Is there a budding Einstein in the audience? Even if you missed the Nobel Prize this year, you can challenge the top scorers in the Science Trivia Hall of Fame. Test your knowledge of biology, chemistry, physics and mathematics through the Science Trivia Quiz. The multiple choice questions are chosen randomly from a large database, and will vary each time you play the game. Questions and comments can be discussed in the Science/Math Forum (GO SCIENCE).

9.6.6
Sailing Forum **SAILING**
Ahoy sailors! Sea dogs interested in staying downwind of current events should join the Sailing Forum. Members will share information and opinions about all aspects of sailing including equipment, racing and favorite cruising spots.

9.6.8
Astronomy Forum **ASTROFORUM**
Amateur or professional stargazers can join cosmic forces with fellow astronomers around the world. Beginners with a universe of questions can learn about hardware or techniques. Professionals can take advantage of the Astronomy Forum to rapidly disseminate information among colleagues. Members of all levels can learn about national or international special events of interest. Archives contain public domain astronomy software and quality reference articles.

10.3.1.12
Electronic Answer Man **EAM**
Do you want to study overseas? How do you patent your invention? Are pests destroying your organic garden? The Electronic Answer Man can help you on almost any topic. EAM describes government publications, public agency departments and funding sources.

10.5.1
Missing Children **MIS**
Missing Children is a service provided by the National Child Safety Council to assist in locating abducted children. The Missing Children database includes the names of the missing children along with their physical descriptions and last known locations. If your terminal or computer has a graphics mode, you can see portraits of the missing children.

If you have any relevant information about a missing child, please contact the detective listed for the case.

Explore Exotic Online Destinations ...Offline.

Keeping up with all of the offerings of the world's largest general information service is quite a challenge. New products are always arriving. It's been that way every month for years. And while you may have favorites, there are a world of other offerings you may have never visited.

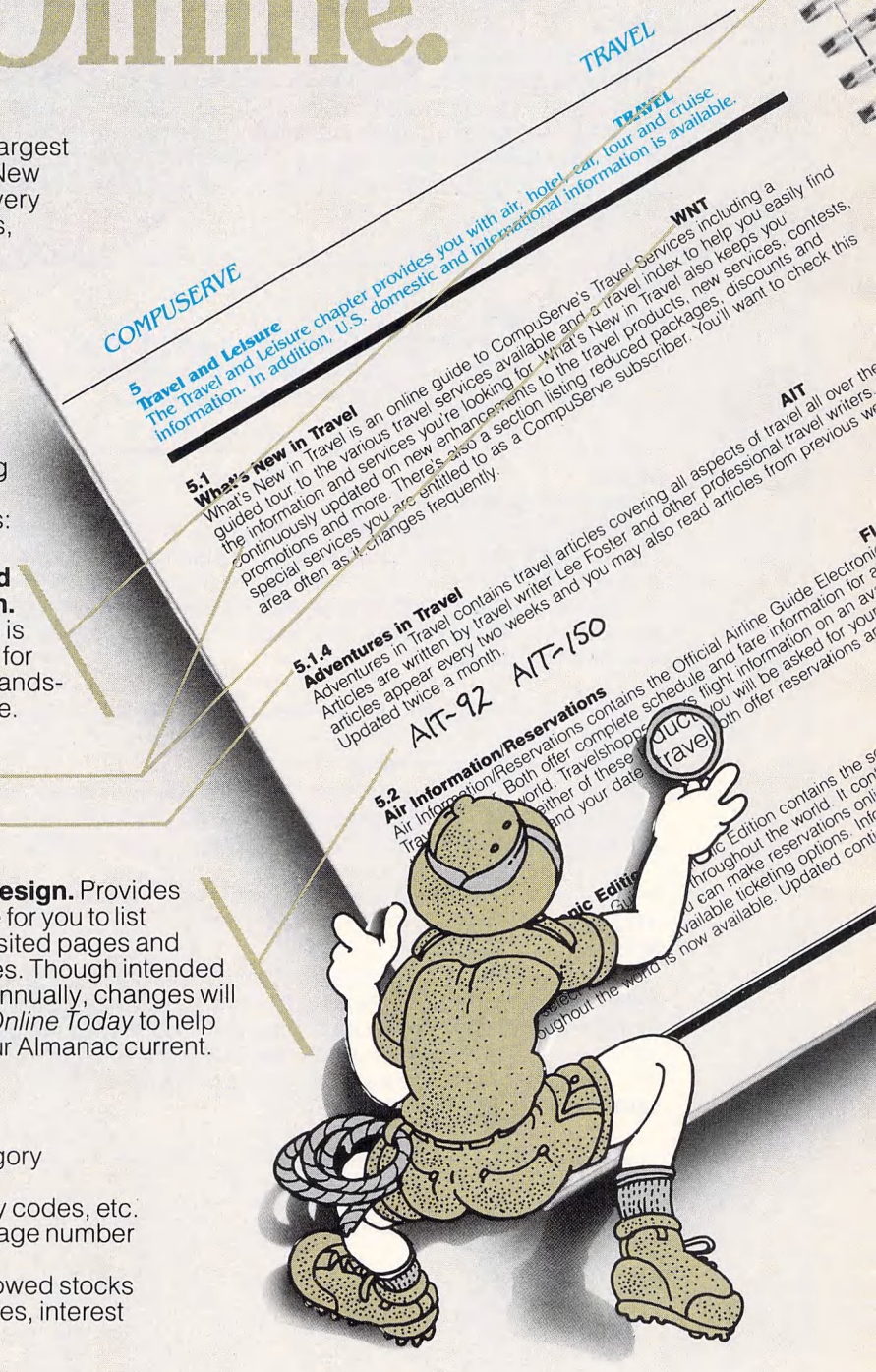
The CompuServe Almanac is for you. This handy publication gives you a chance to explore the products and services of the CompuServe Information Service—without picking up the tab for visiting them individually online. And it's loaded with helpful features that online adventurers will find invaluable when hiking through remotest CompuServe, exploring new terrain, or finding their way back to favorite places:

Comprehensive. Includes descriptions and Quick Reference Words for hundreds of products and services, along with indicators for products with special pricing.

Spiral-bound construction. The Almanac is spiral-bound for convenient hands-free reference.

Fully-indexed. Uses a numerical coding system to help map the relative position of products and product groups—providing users with a "sense of location" within the service.

Workbook design. Provides ample space for you to list frequently-visited pages and insert updates. Though intended for re-issue annually, changes will be noted in *Online Today* to help you keep your Almanac current.


COMPUSERVE
TRAVEL
5 Travel and Leisure
The Travel and Leisure chapter provides you with air, hotel, car, tour and cruise information. In addition, U.S. domestic and international information is available.
TRAVEL
5.1 What's New in Travel
WNT
What's New in Travel is an online guide to CompuServe's Travel Services including a guided tour to the various travel services available and a travel index to help you easily find the information and services you're looking for. What's New in Travel also keeps you continuously updated on new enhancements to the travel products, new services, contests, promotions and more. There's also a section listing reduced packages, discounts and special services you are entitled to as a CompuServe subscriber. You'll want to check this area often as it changes frequently.
5.1.4 Adventures in Travel
AIT
Adventures in Travel contains travel articles covering all aspects of travel all over the
Articles are written by travel writer Lee Foster and other professional travel writers.
articles appear every two weeks and you may also read articles from previous w
Updated twice a month.
AIT-92 AIT-150
5.2 Air Information/Reservations
Air Information/Reservations contains the Official Airline Guide Electroni
Both offer complete schedule and fare information for a
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CompuServe

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An H & R Block Company

Turbo Modem

EVI/Fastcomm Data Corp. has added a new 19,200 baud "Turbo" model to its line of dial-up Fastcomm "All Speeds in One" modems.

The Turbo adds error-free 19,200 baud capability to a Fastcomm 2496 or 9600 modem, increasing data throughput by at least 10 percent. Selling for $999 to $1,099, the Turbo is expressly designed for uni-directional large file transfer applications from micros to mainframes. Current customers may upgrade for $100.

For information, contact EVI/Fastcomm Data Corp., 12347-E Sunrise Valley Dr., Reston, VA 22091; 703/620-3900.

Portable Modem

Touchbase Systems Inc. has introduced the WorldLink 1200 Portable Modem, a compact, battery-powered, Hayes-compatible device for use with portable and desktop computers.

The unit provides a direct interface for acoustic cup operation at both 300 and 1200 baud. Features include auto-dial, auto-answer and pulse and tone dialing. It is available with either a male or female DB-25 connector. An array of four LEDs provides visual status of call progress, carrier detect, high/low speed and low battery condition. Retail price is $199.

For information, contact Touchbase Systems Inc., 16 Green Acre Ln., Northport, NY 11768. 516/261-0423.

Talking Terminal

A third generation integrated voice-data workstation called the Conversational Terminal has been introduced by Cermetek Microelectronics Inc.

Designed especially for those who want a computer for only telecommunications purposes, the Conversational Terminal sells for $500 and features a smart telephone, database access and electronic mail capability. Also included are a speaker phone, phone directory, appointment calendar, local terminal mode and calculator. Menu-driven, push-button software takes the user through each operation.

For information, contact Cermetek Microelectronics Inc., 1308 Borregas Ave., Sunnyvale, CA 94088-3565; 408/752-5000.

Mainframe Access

Videodial Inc. has introduced ITEX.25, a CICS application that gives 3270 terminals access to external ASCII databases such as CompuServe.

Billed as a first in IBM mainframe-based software products, ITEX.25 provides the ASCII/EBCDIC translation, the connection and automatic log-on to ASCII services. Other features include easy access through menu choices or direct selection, defined gateway services for immediate implementation and fully documented instructions for tailoring connections to other X.25 services.

For information, contact Videodial Inc., 1700 Broadway, New York, NY 10019; 212/307-5005.

Error-Control Modem

The Courier 2400e modem from USRobotics Inc. features Level 2 MNP error- and flow-control protocol.

The new asynchronous modem has auto-dial and auto-answer features and is compatible with virtually all popular data communications software. It may be used with any RS-232C serial-equipped computer or data terminal. Another new feature of the Courier 2400e is non-volatile Random Access Memory (NRAM), which saves user-defined modem settings from session to session, even if the modem is turned off and on.

For information, contact US-Robotics Inc., 8100 N. McCormick Blvd., Skokie, IL 60076; 800/342-5877 (nationwide) and 312/982-5001 (Illinois).

PC-Term Upgrade

PC-Term, a general purpose communications software package for the IBM PC, PC-XT, PC-AT and compatibles from Crystal Point Inc., has been upgraded.

Version 3.1 features emulation of 16 different terminals, full-featured macro language, menu-driven operation for novice users, support for XMODEM and Kermit protocols and Ungermann-Bass Net/One network operation. Retail price is $250.

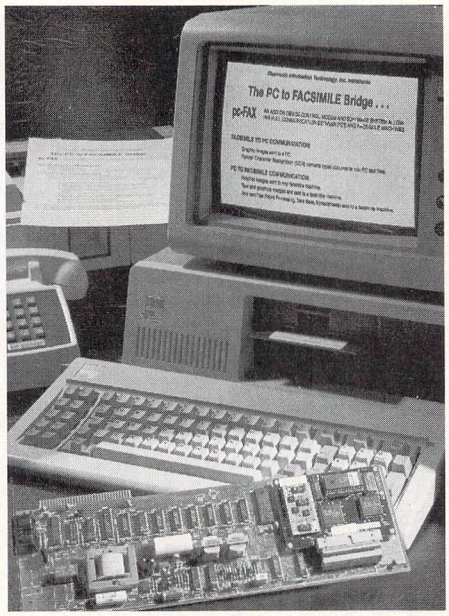
For information, contact Crystal Point Inc., 12221 N.E. 140th, Kirkland, WA 98034; 206/821-1909.

Multi-function Modem

pc-FAX from Electronic Information Technology Inc. is a multi-function 9600 baud modem board and software.

Features include complete PC-to-PC communications via software that lets any authorized user poll and receive virtually any disk file, including executable programs, source codes, command files, ASCII and facsimile files and scanned image files. It also handles Group III transmissions between facsimile machines and personal computers. The full-sized card is inserted into the IBM PC, PC-XT, PC-AT or compatible computer and connected using standard telephone lines. Retail price is $1,095.

For information, contact Electronic Information Technology Inc., 373 Route 46 W., Fairfield, NJ 07006; 201/227-1447.



High-Speed Courier

USRobotics Inc. has introduced the Courier HST (High Speed Technology) 9600 baud modem designed for use on voice-grade, dial-up telephone circuits.

Selling for $995, the modem provides full-duplex 9600 baud data communication through an asymmetrical frequency division of the telephone channel. This design provides simultaneous 9600 baud and 300 baud data channels. The Courier HST automatically falls back to 2400, 1200 and 300 baud in both answering and originating calls to connect with nearly any modem.

For information, contact US-Robotics Inc., 8100 N. McCormick Blvd., Skokie, IL 60076; 800/342-5877 (nationwide) and 312/982-5001 (in Illinois).

New Smartmodem

Feature enhanced versions of the Smartmodem 2400 and Smartmodem 2400B have been introduced by Hayes Microcomputer Products Inc.

The new features are designed to provide easy access to modem configuration settings and to increase stored phone number capacity in both modems. Capable of Hayes AutoSync communications mode, the modems can place calls asynchronously and then automatically switch to synchronous operation once the telephone connection is fully established. The Smartmodem 2400 sells for $899 and the Smartmodem 2400B board is $739.

For information, contact Hayes Microcomputer Products Inc., 705 Westech Dr., Norcross, GA 30092; 404/449-8791.

Apple IIGS Software Tools

Pecan Software Systems has implemented its Power System family of software development tools for the new Apple IIGS computer.

Included in the release are UCSD Pascal, Modula-2, FORTRAN-77, BASIC and Assembler. UCSD Pascal is source-compatible with Apple Pascal and provides an environment familiar to Apple Pascal programmers. Additional features include multitasking, dynamic memory management, extended precision arithmetic and separate compilation. The Power System Professional Pak is available for $199.95.

For information, contact Pecan Software Systems Inc., 1410 39th St., Brooklyn, NY 11218; 718/851-3100.

Correcting-Card Modem

May-Craft Information Systems Inc. has introduced the Microcom PC Card modem, the first one slot, no cable, error- correcting internal card modem.

Incorporating MNP, an industry standard communications protocol that eliminates data errors and increases data throughput, the modem requires no additional software for operation. Three modems are available: the PC/2400, the PC/2400c and the PC/9624c with prices ranging from $699 to $1,799.

For information, contact May-Craft Information Systems Inc., 4312 Beltwood Parkway S., Dallas, TX 75244; 800/527-7456 (nationwide) and 214/392-3766 (in Texas).

Electronic Edition Product Announcements

The following new product announcements are available this month on *Online Today Electronic Edition* by typing GO OLT-250 at any CompuServe Information Service prompt.

Golden Retriever, *intelligent document and text retrieval program for the IBM PC, XT, AT and compatibles, SK Data*

Means & Windows Toolkit, *software to add pull-down menus and pop-up windows to Apple II programs for Apple II series of computers, Swan Software.*

PC-Words, *dictionary of computer terms for the IBM PC or compatibles, Hire Education Inc.*

WordStar Professional Release 4, *word processing software for the IBM PC, compatibles and CP/M based machines, MicroPro International Corp.*

Multiplan Version 3.0, *spreadsheet networking software for the MS-DOS operating system, Microsoft Corp.*

ScenicWriter, *desktop publishing system to be used with any DOS editor, ScenicSoft Inc.*

Vantex Word Version 2.0, *word processor for the IBM PC and compatibles, Vantex Data Systems.*

Duran Dots, *a daisy wheel printer that produces both print and braille characters, ARTS Computer Products Inc.*

Seven high-end computer-based desktop publishing systems, *for the IBM PC and compatibles, Xerox Corp.*

SHOPPER'S GUIDE

SOFTWARE

RACE/FOOTBALL HANDICAPPING
Software Exchange
P.O. Box 5382-OL
W. Bloomfield, MI 48033
313/626-7208
CompuServe 70215,460

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FLOWERBASE 451
Datachem
Westboro, MA.
800/225-5669

Create an explosion of color with your own complete, easy to use database of popular flowers. All menu driven, no programming needed. 451 flowers their color, zones, soil, sun etc. Comes with custom installation program, supports color or monochrome monitor. IBM or true compatibles 1 DD 256k ram, DOS 2.0 or higher. Price is $49.95. Order now call 800-225-5669 7D/WK VISA/MC Accepted.

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363 Chelsea Rd.
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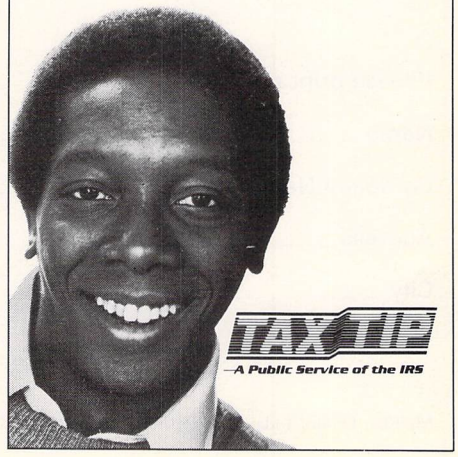
Dealers in 48 contiguous states, Canada and Puerto Rico have bought and/or sold computers, monitors, drives, etc., through our office for almost 2 years. Now you can, too. We sell Apple, AT&T, Compaq, H.P., IBM and compatibles. Current offerings include Compaq Deskpro 286 Model 1 (Retail $2,999) at only $1,829 (39% off) IBM AT Model 68 (Retail $3,995) at only $2,325 (41.8% off) IBM XT Model 268 (Retail $2,145) at only $965 (55% off) Apple Mac Plus (Retail $2,499) at only $1,599 (36% off). Note: Since we deal with so many suppliers we can not guarantee the continuing availability of any offerings herein listed, so buy it now. Call Mary, Paula or Beth at 314/256-0185.

"Here's a NEW TAX LAW tip"

The new tax law does not affect most 1986 tax returns. If you have any questions on 1986 changes, check your tax package, or order Publication 553, "Highlights of the 1986 Tax Law Changes." Call 1-800-424-FORM (3676) or the IRS Forms number in your phone book to get a copy.



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For free information on products or services in this issue of *Online Today*, fill in your name, address, ZIP code and phone number. Then circle the number that corresponds to the number of the advertisement or article in which you are interested.

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14	34	54	74	94
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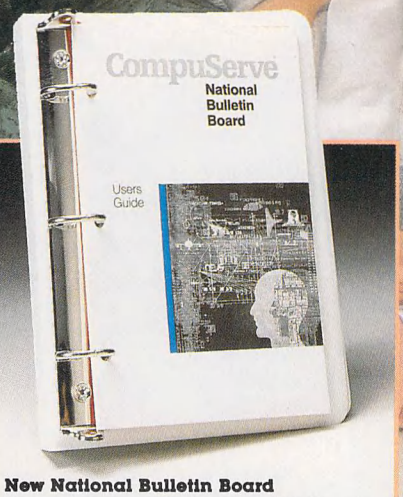
April issue, not valid after July 1987.

finger Shopping

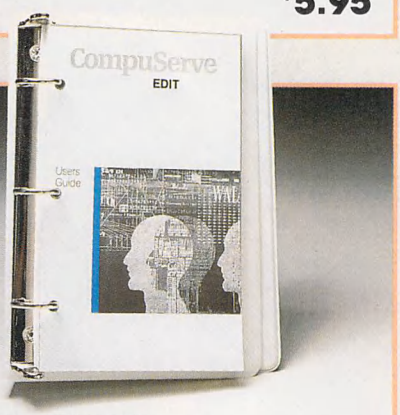
CompuServe offers a variety of products that save you time and money whenever you log on. Others that bring online products to a much fuller life. And still others that make being a CompuServe subscriber a more fashionable pastime.

NOTE: Prices for our entire product line have been revised since our last sale. Postage and handling charges, previously included in the price of each item, are now automatically calculated at the end of the ordering procedure. (A table at the back of this section outlines the new shipping and handling prices.)



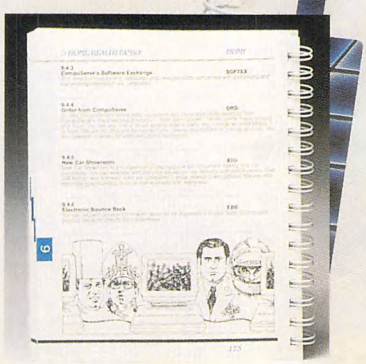
New National Bulletin Board Users Guide and Reference Card
FOR SALE, WANTED, NOTICE. The National Bulletin Board is a free electronic advertising service for subscribers to the CompuServe Information Service. This manual prepares you to participate. Search listings by keyword. Take advantage of special features that help swiftly pinpoint items of interest.

$5.95



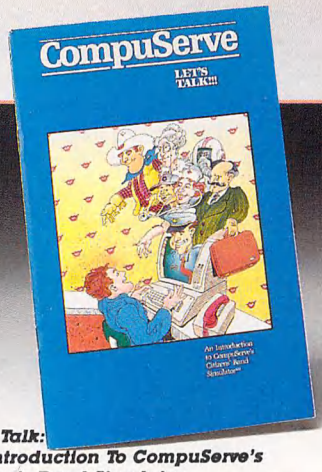
New EDIT Guide and Reference Card
Become a more proficient user of the line editor used in many CompuServe products — EasyPlex, Forums, Personal File Area, etc. Compose and edit memos, notes and text quicker and error-free. Comes with a reference card that summarizes commands and their abbreviations.

$5.50



New CompuServe Almanac
There are literally hundreds of offerings on the CompuServe Information Service you may have never visited. Use the CompuServe Almanac to become acquainted with all of them — without visiting them individually online. Its 300+ pages are loaded with helpful features, presenting products in "workbook" style to help you research and recall key destinations by area and page number. It's certain to pay for itself in connect time savings.

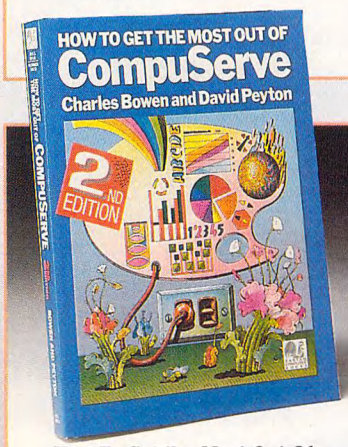
Reg. $12.95 **SAVE $5** **$7.95**



Let's Talk: An Introduction To CompuServe's Citizen's Band Simulator

Although you can teach yourself to *access* CB in a single session, you won't have any idea about the real capacity of CB as a communications utility and modern day party line until you read this primer for computer conversation.

$4.95



How To Get the Most Out Of CompuServe (Second Edition)
by Charles Bowen and David Peyton

The first edition of this book from Bantam earned acclaim from longtime CompuServe users, novices, and even non-subscribers for its step-by-step discussion of CompuServe's leading products. The second edition also includes a $6 CREDIT!

$16.95

The CompuServe Information Service Subscription Kit

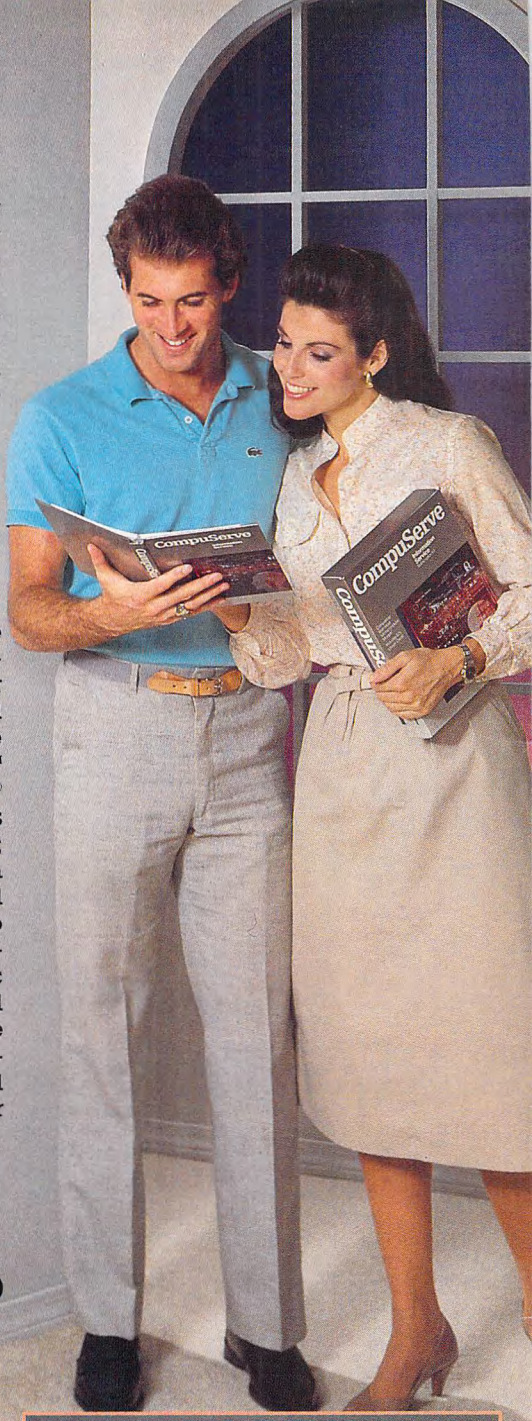
Why not have another User ID number and electronic mailbox for a traveling member of the family or firm? The CompuServe Information Service Subscription Kit includes a 24-page full-color overview of the service offerings, over a dozen Reference Cards, a Quick Reference Word index, a System Configuration Diagram, plus:

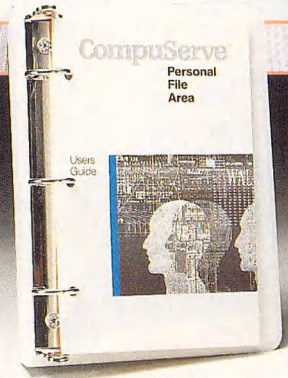
- a $25 introductory usage credit
- a User ID number and password
- a list of Information Service rates and local telephone access numbers
- an introductory subscription to *Online Today* magazine

The Kit includes an **Information Service Users Guide** (also available separately), a spiral-bound, hardcover 200-page guide, highly recommended for subscribers who've come online through the CompuServe IntroPak™ program. The guide covers: EasyPlex® electronic mail; the Executive News Service; the National Bulletin Board; Citizen's Band Simulator; forum message boards, data libraries and conferencing; information transfers to and from your computer; travel services; financial services; electronic shopping; interactive games; and more. When purchased separately the guide also includes: a System Configuration Diagram, an alphabetized Quick Reference Word index, and over a dozen Reference Cards.

Subscription Kit
$39.95

Users Guide
Reg. $14.95
Save $4.00
$10.95

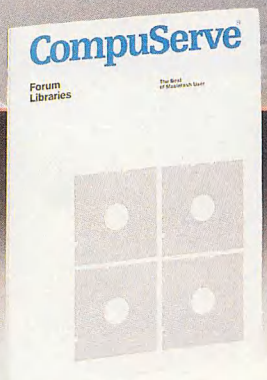




Personal File Area Guide

All subscribers receive 128K of storage in a personal file area. EasyPlex messages, Executive News Service clippings, files, "form" letters and more can be stored for 30 days without charge. File management programs, text editors, disk storage techniques, EasyPlex shortcuts, and more are explained in this guide. Includes: ICS, Terminal Parameter, and EDIT Reference Cards.

Reg. $10.95 **SAVE $3.45** **$7.50**



Forum Data Library Directories

These five forum software guides present indexed descriptions of top offerings from leading personal computing Forums. *The Best of IBMNET*, and four similar guides for the *Amiga, Atari 8-Bit, Tandy Model 100* and *Macintosh* Forums catalog literally hundreds of powerful utility programs and stand-alone applications available for public access on CompuServe.

$9.95

SeaWARS Tee-shirt

Now hear this: SeaWARS enlistees will be considered out of uniform without the official SeaWARS tee-shirt. Available appropriately in navy on light blue, the shirt depicts a port bow hit.

Reg. $6.95
SAVE .45
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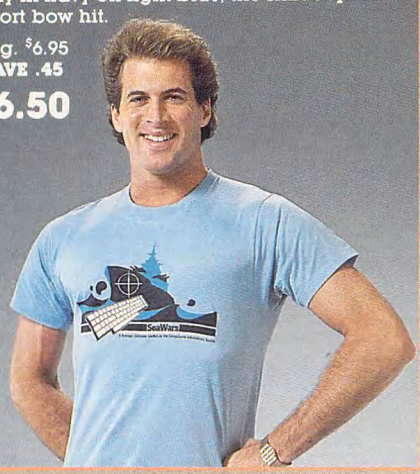
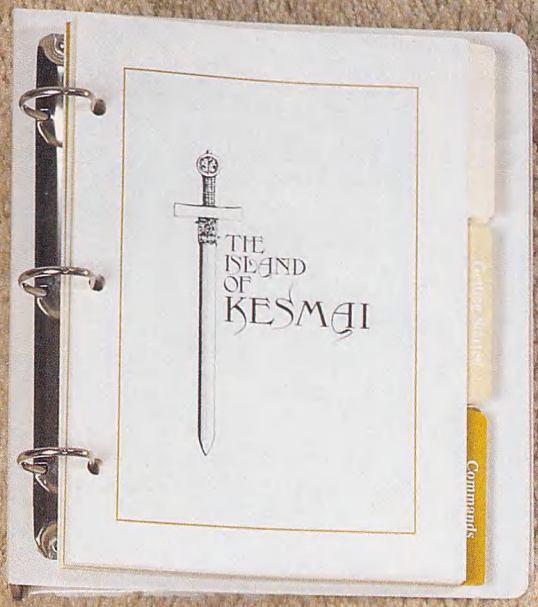


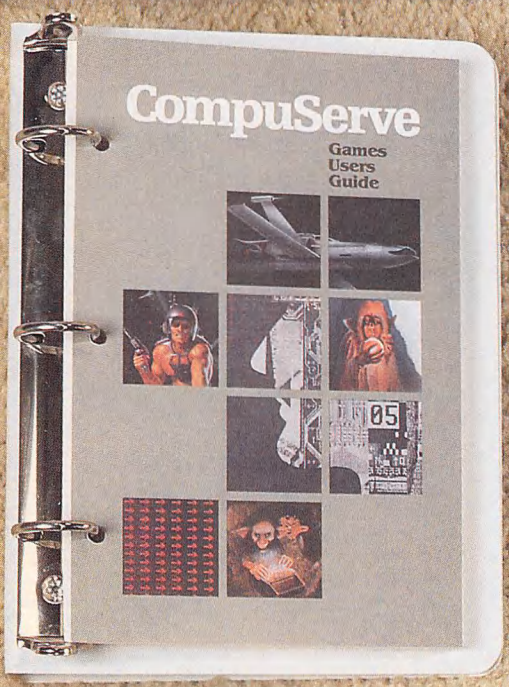


New Island of Kesmai Guide
One of CompuServe's leading adventure games, Island of Kesmai is like no other online island you may have visited. Prepare yourself — with this comprehensive island atlas. Meet the inhabitants. Learn their customs and social mores. You won't just bring the game's interactive features to greater light, you'll lead a longer life in your island role.

Reg. $16.50 **SAVE $1.55** **$14.95**

MegaWars I Package
Realistic accessories for the fantasy gamer. This package includes a MegaWars Briefing Guide in a three-ring binder, along with a series of five MegaWars spacecraft blueprints and a galaxy map.

Reg. $16.95 **SAVE $2** **$14.95**



CompuServe Games Guide
CompuServe leads the online computing world in multi-player, adventure, space and war game offerings for microcomputer gamers of all ages and intellects. Play them to meet fascinating characters, negotiate puzzling scenarios, plan elaborate strategies, and more. This survey of the CompuServe game universe offers descriptions of all our game offerings and a section on getting the most out of our Gamers' Forum.

Reg. $14.95 **SAVE $4** **$10.95**

MegaWars Color Poster
Handsome full color MegaWars wall poster depicting an evil Kryon confronting the champions of the Colonist's Empire. Measures 25" x 38".

Reg. $4.95 **SAVE $2.45** **$2.50**

BLACKDRAGON Tee-shirt
Cross the Labyrinth, slay the dragon and live? Announce your success with this black tee-shirt with white BlackDragon illustration.

Reg. $6.95
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CompuServe Logo Tee-shirt
Announce your online allegiance with this cotton/poly tee-shirt silkscreened with the CompuServe logo. Available in light blue, navy blue and red.

Reg. $6.95
SAVE .45
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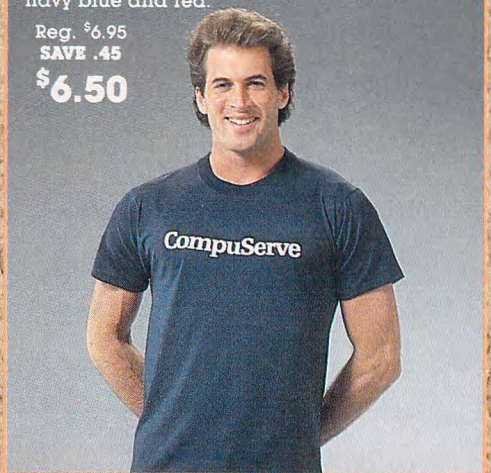

"I've Got A Handle On CompuServe CB"
Tell the world you're a part of the fastest growing interactive communications revolution since the telephone — CB — with this colorful tee-shirt. Available in selected colors listed online.

Reg. $6.95
SAVE .45
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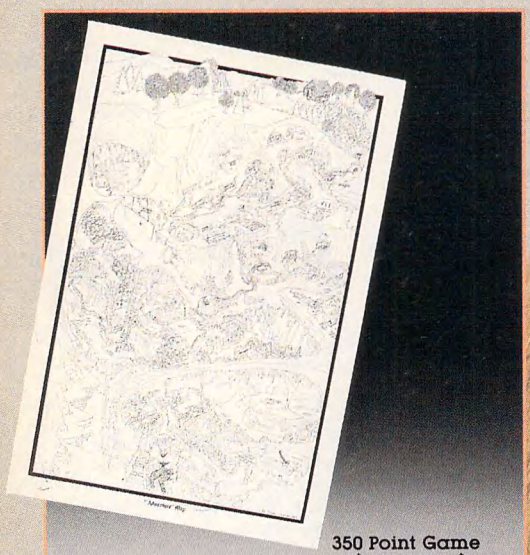


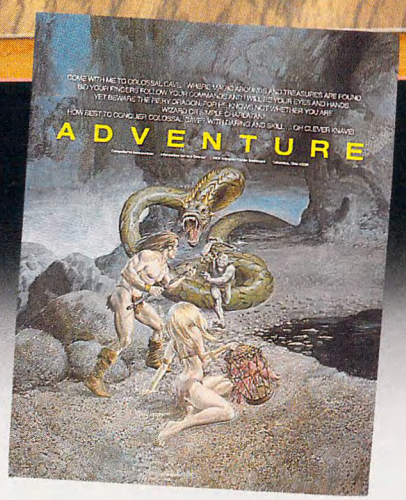
350 Point Game
Reg. $3.95 **SAVE $2.45**
$1.50

Adventure Game Maps
Exciting adventure maps, drawn in outline so participants can color their maps to match their imaginations. Both illustrate pathways and pitfalls one encounters in the Adventure game's Colossal cave. Available for both the 350 and 751 point games.

751 Point Game
Reg. $4.95 **SAVE $3**
$1.95

New CompuServe Digital Desk Clock
Mounted within a clear lucite desk stand for high-visibility, this contemporary timepiece is an attractive and useful addition to any computer workstation — home or office. It prominently displays the CompuServe logo and comes with a calendar in an adjacent window that includes interchangeable monthly templates which can represent any configuration of days in a month.

Reg. $10.95 **SAVE $4.45** **$6.50**



Adventure Game Color Poster
Two able Adventurers battle a huge green serpent and an axe-wielding dwarf in this vivid full color poster. Measures 18" x 24".

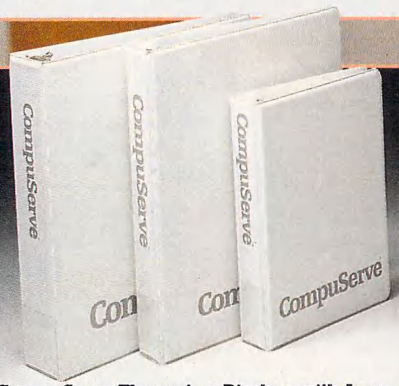
Reg. $4.95 **SAVE $3** **$1.95**

CompuServe Information Service System Configuration Wall Chart
This 35" x 33" poster (10/86 version) depicts all screens appearing on the Top Menu and all screens accessible from those initial choices.

Mailed in tube **$4.95**
Shipped folded **$3.95**

CompuServe: First Choice of a Network Nation — Poster
World-renowned illustrator, Fred Otnes, produced the commissioned illustration that is the focal point for this full color, 23" x 30" poster. A perfect addition to a home computer alcove or office wall. Shipped unfolded in a sturdy mailing tube.

Reg. $4.95 **SAVE $1.45** **$3.50**



CompuServe Three-ring Binders with Logo

1½" spine, for 8½" x 11" pages (vinyl) **$3.50**

1" spine for 5½" x 8½" pages (vinyl) **$2.50**

1½" hardboard binder and slipcase for 5½" x 8½" pages
Reg. $3.95
SAVE $1.45
$2.50
(not shown)

Back Issues of *Online Today* Magazine
Online Today magazine's back issues represent a cache of incisive articles tracking the evolution and impact of videotex and computer communication. Use a list of feature articles from back issues, provided online, to obtain volumes missing from your set, or to select issues of interest published before you became a subscriber.

Reg. $2.50 **SAVE $1** **$1.50**

Grolier Online Encyclopedia
Introducing the Grolier Academic American Online Encyclopedia for students of all ages. The Grolier Subscription Kit features a one-year renewable subscription to the Grolier Online Encyclopedia, plus a membership to CompuServe, a $15 Usage Credit and complete Grolier and CompuServe Users Guides.

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VIDTEX™ Terminal Communications Software
No one links you to CompuServe like CompuServe. Whether you have an Apple®, an Atari®, or a Commodore® . . . you'll get the best link-up with genuine CompuServe communications software. (Complete information about VIDTEX compatibility requirements is available online: GO VIDTEX.) Only CompuServe gives you all of these features in a complete communications software package:

- "instant" FREE software updates online
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- automatic logon and menu navigation files
- programmable function keys
- full printer support (including "print screen")
- capture buffer
- adjustable communication settings
- cursor positioning
- support of Hayes-compatible modems

For the Atari 800, 800 XL, 600 XL with 64 K,1200 XL, 65 XE, 130 XE
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For TRS-80 Model III and Color Computer

$39.95

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No one links your IBM PC, XT, or PCjr. to CompuServe like CompuServe. The Professional Connection includes all the features of VIDTEX, plus:

- COLOR graphics
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- user-defined dialogues with the Remote Job Script Command Language
- powerful command language

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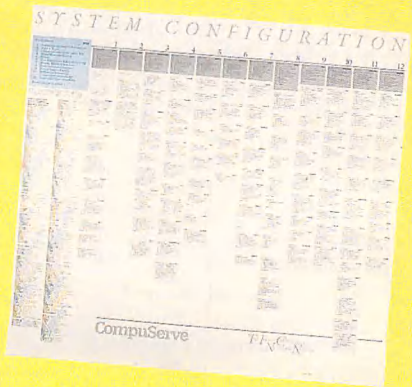

FREE with qualifying purchase of $25
CompuServe Information Service System Configuration Wall Chart

As a special incentive to place an online order during the Fingershopping Sale, any order over $25 placed between March 1 and April 30 will receive a CompuServe Information Service System Configuration Wall Chart (new 10/86). FREE. The chart (folded version) will be included automatically in qualifying orders, there is no need to enter an order for your bonus item.

Detailed descriptions and prices for all products available for Fingershopping can be found online. GO ORDER at any prompt.

Non-subscribers may order by calling 800/848-8199.
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$ 7.50 — $14.99	$2.00
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$40.00 — $69.99	$3.00
$70.00 — and up	$3.50

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Columbus, Ohio 43220

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How to Save Online Computing Time

We're all looking for ways to get more for our money, and on CompuServe, the key is in doing more of our *thinking* offline. Instead of using valuable connect time to compose a long message, for instance, it's smarter to first do the writing and editing in a word processor and upload the finished file to CompuServe.

Any personal computer is capable of uploading this way, but it's tricky to explain the operation in general terms because of two important variables: the word processor you're using and your communications software. However, if you're willing to do a little research on your own, you can learn the procedure.

First, about your word processor: Textfiles prepared for uploading must be in ASCII form. Most word processors these days save text in a "compressed format" (saving space on the disk and imbedding special codes they use). That's fine offline, but for uploading text to CompuServe, the letter must be in plain vanilla ASCII, so you'll need to consult your users manual for details. (If you don't find any discussion under "ASCII" in the manual's index, look up "formatted save" or "DOS save.")

About your communications program: It needs to have a method for transmitting textfiles. If you're using VIDTEX or The Professional Connection software, you have access to CompuServe's own B protocol for the transfer. If not, your program may support another protocol, such as Ward Christensen's popular XMODEM (MODEM7) method. Most programs these days offer at least a capture buffer transfer (sometimes called an "ASCII dump"). This method simply transmits one line of the text at a time, just as if you were typing it very quickly.

Now, two things about length and format need to be kept in mind while writing messages for later transmission:

- The letter you want to upload can be no longer than 8,000 characters (8K) and it cannot exceed 600 80-character screen lines.
- Each screen line should end with a carriage return. If you were writing the message online, you would need to end each screen line by pressing the Return key. Just remember that the carriage returns also should be in place in files you want to upload.

Omitting these carriage returns is a common mistake, so let's look closer for solutions.

Obviously, the easiest way around the problem is to put in the carriage returns as you write the message offline. While in your word processor, pretend you're online and press the Return key at the end of each screen line.

If you don't want to do that, perhaps your word processor can help. Using WordPerfect on my IBM compatible, I write my messages offline as I would any other text. Then when I'm ready to save the file on disk, I set the margins to 80 characters and select a "DOS save" option. In addition to saving the file in ASCII, this option automatically puts a carriage return at the end of each line. Find out if your word processor has a similar function.

Finally, if your word processor just is not up to the task, perhaps your communications program is. Some terminal programs these days have a "format text" option that can be used in preparation for text transmissions. Others prompt for a line length or width before transmitting.

No matter which route you choose, just remember that CompuServe wants your file in lines of 80 characters or less, and wants no more than 600 lines in a letter.

Once the letter is written and saved in ASCII on a disk, you're ready to log onto CompuServe and upload it. Type GO EASYPLEX at any prompt. Then, at the main menu of the mail system, select the "UPLOAD a message" option.

This will cause CompuServe to "speak privately" with your computer to see if it recognizes the software you're running.

If it does not, the system will display a menu and ask you to indicate which protocol to use for the transfer (XMODEM protocol, CompuServe B protocol, DC21DC4 Capture protocol or no protocol).

If it does recognize your software—that is, if you're using VIDTEX/Professional Connection—CompuServe will assume you want to use B protocol and skip the Protocol menu. If you choose XMODEM protocol or CompuServe B protocol, the Transfer Type menu will be displayed. The choices are ASCII and Binary. Select ASCII to upload textfiles.

Next CompuServe will display "Starting Transfer." If you're using VIDTEX-compatible software, the system will initiate the transfer. If you're using another kind of communications program, you may need to initiate the transfer yourself. Check your manual on that.

Finally, when the file has been transferred, the system will inform you to "press the Return key to continue." Your message will be in your EasyPlex workspace, from which you can FILE DRAFT copy or SEND the message, just as if you had written the whole thing online.

You also can upload textfiles directly to your Personal File Area. If you have some text, such as a "form" letter you want to keep in storage, you could type GO PER at any prompt to reach your Personal File Area and, at the subsequent menu, select the option to "Upload or download a file." That would produce the menu of possible transfer protocols, and from there you would follow the same procedure as in EasyPlex.

Other areas of CompuServe, including the forums, currently do not support transfer methods such as B protocol and XMODEM, but you can use the capture buffer method to upload prewritten files. To upload a file to the message board of a forum, follow the usual procedure for leaving a message (filling in the "To:" and "Subject:"). Then, when the system prompts you to begin writing the message, initiate the capture buffer transmission. After the transfer is done, close and store the message as you would any other you have composed in a forum.

One thing to remember about files prepared for the forums is that there is a different length requirement. While an EasyPlex message can be up to 8K in length, messages on the forums are limited to 2,000 characters or 96 lines, whichever comes first.

For more help writing messages in various parts of the system, visit Customer Service's new Questions and Answers area by typing GO FEEDBACK at any prompt.

Charles Bowen, co-author of How to Get the Most Out of CompuServe, *is a contributing editor of* Online Today. *His CompuServe User ID number is 70007,411.*

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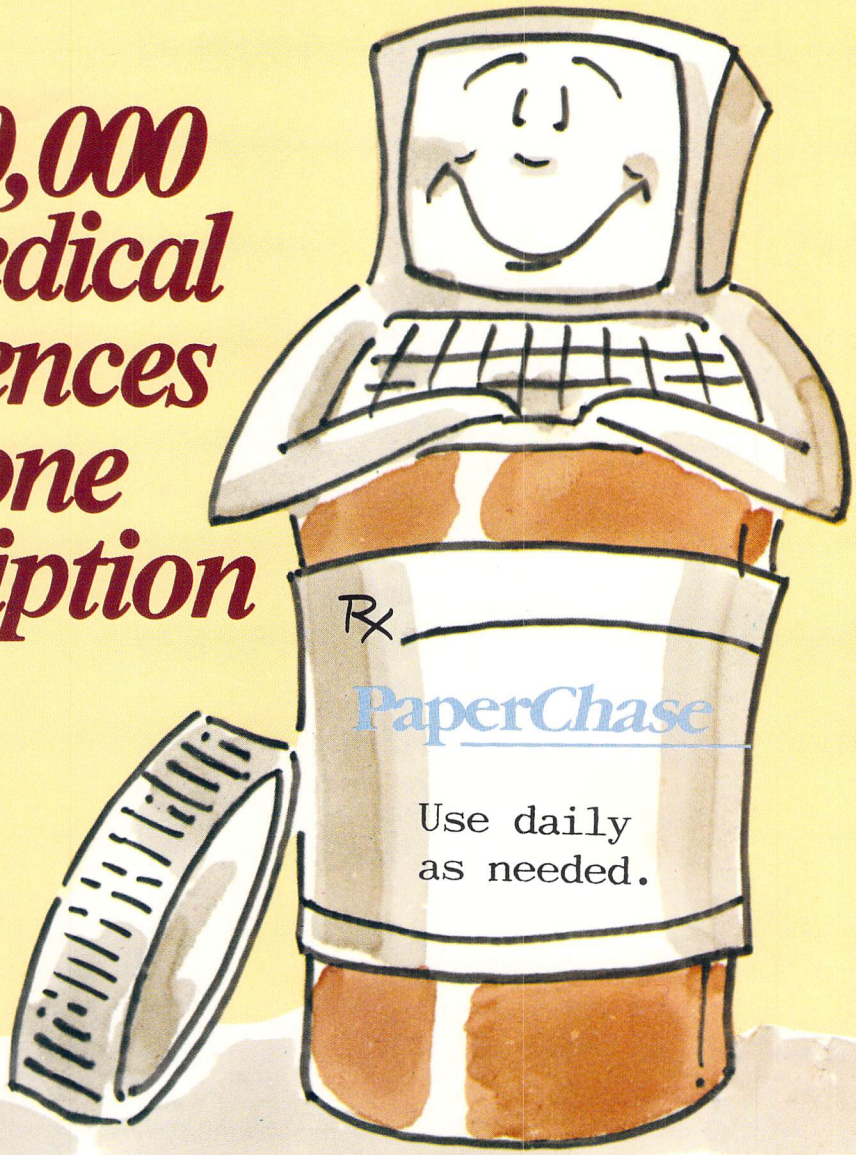

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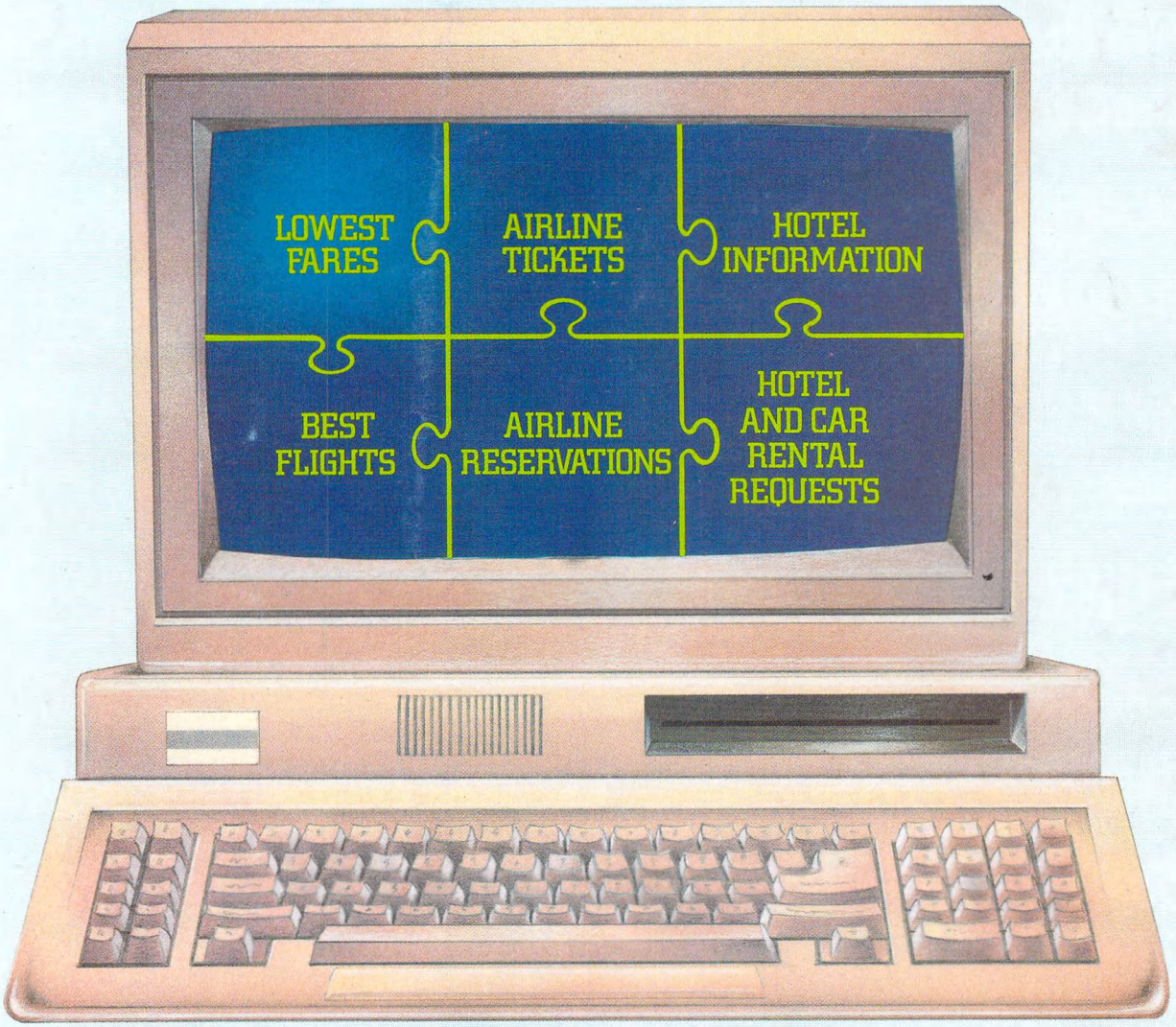

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